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PURI.

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BENGAL DISTRICT GAZETTEERS.

PURI.

BY

L. S. S. O'MALLEY,

INDIAN CIVIL SERVICE.

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PREFACE.

I DESIRE to acknowledge the assistance I have derived in compiling this volume from the Report on the Settlement of the Sadar subdivision of the Purī District, by Mr. H. McPherson, I.C.S., which is published as an Appendix to the Final Report on the Survey and Settlement of the Province of Orissa (1890–1900), by Mr. S. L. Maddox, I.C.S. The plan of the Khandagiri and Udayagiri caves has been prepared with the help of a plan kindly lent by the Superintendent, Archæological Survey, Eastern Circle. Chapters II, IV and XVI have been written in collaboration with Bābu *Monmohan Chakravarti*, M.A., B.L., Assistant Superintendent, Gazetteer Revision, Bengal.

L. S. S. O'M.

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GAZETTEER

OF THE

PURI DISTRICT.

CHAPTER I.

PHYSICAL ASPECTS.

GENERAL DESCRIPTION.

THE district of Purī, the southernmost district of the Orissa Division and of the Province of Bengal, is situated between 19° 28′ and 20° 26′ north latitude and between 84° 56′ and 86° 25′ east longitude. It extends over an area of 2,499 square miles and contains a population, according to the census of 1901, of 1,017,284 souls. The district is named after its headquarters Purī, situated on the shore of the Bay of Bengal in 19° 48′ N. and 85° 49′ E. The place is known to up-country Hindus as Jagannāth and locally as Purushottam Kshetra, the abode of the best of beings, *i.e.*, Jagannāth, the lord of the world, whose shrine has, for centuries past, attracted devout pilgrims from all parts of India. The name Purī means simply the city and seems never to have been in use before the British conquest of Orissa; it is believed to be merely an abbreviation of Jagannāth Purī, the city of Jagannāth.

Boundaries.

The district is bounded on the north and north-east by Cuttack; on the south-east and south by the Bay of Bengal; on the west by the district of Ganjām in the Madras Presidency; and on the north-west by the Tributary States of Nayāgarh, Ranpur and Khandparā.

Configuration.

Physically, Purī contains three distinct tracts. Along the sea stretches a belt of sandy ridges, which, towards the Madras frontier, forms a long bare spit of land dividing the great Chilkā lake from the ocean. This belt, formed by the strong monsoon and the violent currents which sweep from the south during eight months of the year, varies from four miles to a few hundred yards in width, and in some places rises into lofty cliffs. It effectually prevents all but two of the rivers finding an exit to the sea, and they are thus diverted to the Chilkā, which is the

great basin into which the rivers of the delta find their way. Behind this barren strip lies a fertile alluvial tract forming the south-western part of the Mahānadī delta. This is a rich, flat region of villages and rice fields, watered by a network of channels, through which the waters of the Koyākhāi, the most southerly branch of the Mahānadī, find their way to the sea. To the extreme east, however, between the Kushbhadrā river and the boundary of Cuttack, there is a strip of high and less fertile land, where cultivation is varied by stretches of moorland and patches of forest and scrub jungle; this tract eventually merges in the jungle round the mouths of the Devī river, where it finds an outlet to the sea in a network of creeks. The third tract is a hilly broken country to the west and north-west, where the land rises in rocky undulations, long ranges of hills, and isolated peaks to meet the wooded glens and mountains of the Tributary States.

Natural divisions. For practical purposes, the district may be regarded as containing two main divisions, a level alluvial tract to the south-east and a hilly tract to the north-west, corresponding with the administrative units known as the headquarters and Khurdā subdivisions. The headquarters subdivision is made up of a deltaic plain stretching from the base of the hills to the Bay of Bengal, and occupying three-fifths of the total area of the district. The Khurdā subdivision comprises the hilly tract to the west and north-west, which contains the remaining two-fifths of the district. It marks the transition from the peaceful, thickly-peopled delta to the wild jungles and mountain passes of the Tributary States, the country along the Dayā being flat and alluvial, while further inland there are long ranges of rugged hills. The river Dayā is, in fact, the boundary between the plains and the inland hilly tract, the country to the north and west being studded with hills, while to the south and east the only hills are the Dhauli hills on the left bank of the river and another group close to the Delāng railway station.

Scenery. The hill ranges run an irregular course from north-east to south-west breaking up the country into small, well-cultivated valleys intersected by small streams. The villages are situated on the higher lands and surrounded by picturesque groves of trees. Many of the hills have been deforested and nothing now remains but a thin covering of scrub jungle, but towards the south, where the ranges run down to the Chilkā lake, they are covered with bamboo and dense jungle. The scenery in some parts of this tract, where the hills rise, range after range, towards the plateau of Central India, is very beautiful.

In the deltaic tract which forms the remainder of the district the scenery is of a different character. To the north there is considerable diversity of level. The higher lands are occupied by small patches of forest, by extensive mango, jack, and *polāng* groves, and by village sites concealed from view in the foliage of banyan, tamarind, and other trees. Rice lands of varied levels fill up the intervening space, and the whole combines to form a pleasing picture, the eye being nowhere wearied by dull flat expanses stretching unbroken to the horizon. As we proceed further south, we come to the second zone of the delta, where there is less diversity of level and woodland scenery is rarer. The village sites are more exposed, and clusters of coconut, palmyra, and date palms take the place of the more leafy groves of the north. The only breaks in the monotony of the landscape are caused by the large rivers, whose banks are fringed with trees and undergrowth. In the southern extremity of this zone the aspect of the country is dreary beyond description. The land is flat as the surface of a table; it is only a few feet above sea-level, and is mostly subject to floods, which convert whole tracts by turn into inland seas or marshy swamps. The village sites are huddled on the top of isolated mounds, some provided by nature, others constructed or developed by art, and the trees, if any, round the homesteads, are seldom more than a group of palms.

The last zone is the area lying beyond the line of cultivation. On the south-east it is a belt of sand along the sea-coast varying from one to four miles in breadth; on the south-west it consists of the great expanse of water called the Chilkā lake. Along the coast is a line of sand hills, which the rivers of the delta find it difficult to pierce. The Kushbhadrā on the east finds an obstructed outlet to the sea; but the Bhārgavī, after flowing due south for nearly 50 miles, is unable to make any headway through the sand, and after throwing off some of its volume into the Sar lake and the Samang Pāt, two shallow lagoons to the east and north of Purī town, turns abruptly to the west and debouches in the Chilkā lake.

LAKES. Chilkā lake.

The Chilkā lake is a shallow inland sea situated in the extreme south of the district and extending into the district of Ganjām in the Madras Presidency. It is separated from the Bay of Bengal by a group of two islands formed by silt deposit and by a long strip of land, which for miles consists of

Most of this account of the Chilkā lake has been reproduced, in a slightly condensed form, and with a few changes necessary to bring it up to date, from the description given by Sir W. W. Hunter in the Statistical Account of Purī.

nothing but a sandy ridge, little more than 200 yards wide. It communicates with the Bay by a narrow inlet through the sandy bar constantly thrown up by the sea—an inlet which in some years has to be kept open by artificial means. On the south-west, it is walled in by lofty hills, in some places descending abruptly to the water's edge, and in others thrusting out gigantic arms and promontories of rock into the lake. On the south, it is bounded by the hilly watershed which forms the natural frontier between Orissa and Madras. To the north, it loses itself in endless shallows, sedgy banks, and islands just peeping above the surface, formed year by year from the silt which the Dayā and other rivers bring down. Thus hemmed in between the mountains and the sea, the Chilkā spreads itself out into a pear-shaped expanse of water 44 miles long, of which the northern half has a mean breadth of 20 miles, while the southern half tapers into an irregularly curved point, barely averaging 5 miles wide.

Its area fluctuates with the season, with the intensity and duration of the annual river floods, and with the ebb and flow of the tide; it is returned at 344 square miles in the dry weather, and about 450 square miles during the rainy season. The normal area of the portion included in this district is 310 square miles. The average depth is from 5 to 6 feet, and scarcely anywhere exceeds 12 feet, except in the south-west. The bed of the lake is a very few feet below the level of sea high water, although in some parts slightly below low water mark. The neck which joins it to the sea is only 200 to 300 yards broad; but the narrow tidal stream which rushes through it suffices to keep the lake distinctly salt during the dry months from December to June. Once the rains have set in, and the rivers come pouring down upon its northern extremity, the sea-water is gradually driven out, and the Chilkā becomes a fresh-water lake. This changeable mass of water forms one of a series of lacustrine formations down the western shores of the Bay of Bengal, the result of a perpetual war going on between the rivers and the sea—the former struggling to find vent for their water and silt, the latter repelling them with its sand-laden currents.

The Chilkā may be regarded as a gulf of the original Bay of Bengal. On the south, a bold, barren spur of hills runs down to the coast; on the north the land-making rivers have pushed out their rounded mouths and flat deltas into the ocean. Nor has the sea been idle: meeting and overmastering the languid river-discharge that enters the Chilkā, it has joined the two eastern extremities with a bar of sand, and thus formed a lake. The delicate process of land-making from the river silt at the north-east

end of the lake is slowly but steadily going on, while the bar-building sea is also busily at work. Old documents show that a century ago the neck of land dividing the lake from the sea was only from half a mile to a mile broad in places where it is now two miles, and the opening in the bar, which was a mile wide in 1780 and had to be crossed in large boats, was described 40 years later as choked up. Shortly before 1825 an artificial mouth had to be cut; and although this also rapidly began to silt up, it remained, as late as 1837, more than three times its present breadth.

The scenery of the Chilkā is very varied, and in parts exceedingly picturesque. In the south and west hill ranges bound its shores; and in this part it is dotted with a number of small rocky islands rising from deep water. Proceeding northwards, the lake expands into a majestic sheet of water. Half-way across is Nalabana (a name meaning "the reed forest" from a kind of reed with which it is covered), an island about five miles in circumference, scarcely anywhere rising more than a few inches above water-level. This island is altogether uninhabited, but is regularly visited by parties of thatchers from the main land, who cut the reeds and high grasses with which it is covered. On the eastern side of the lake lie the islands of Pārikud, with new silt formations behind and now partially joined to the narrow ridge of land which separates the Chilkā from the sea. At some places they emerge almost imperceptibly from the water; at others, they spread out into well-raised rice-fields. Their northern extremity slopes gracefully down to the lake like an English park, dotted with fine trees, and backed by noble masses of foliage. Beyond the northern end of Pārikud, the lake gradually shallows until it becomes solid ground, for here the Purī rivers empty themselves into the lake and the process of land-making is going on. Water-fowl of all kinds, and in the cold weather great flocks of duck, are very abundant in all parts of the lake, black buck and other deer are common on the islands and shores, and large numbers of fish, especially prawns and crabs, are found in its waters.

At its southern extremity, in the district of Ganjām, is Rambhā, which used to be a favourite resort of the European population of Ganjām town. About 2 miles from the shore at this end of the lake is a mass of rocks, known as Breakfast Island, on which a room and conical pillar have been built; this room is said to have been built by Mr. Snodgrass, a Collector of Ganjām under the East India Company, to serve as his office, while the pillar was intended to have a light on the top. There are a few traveller-

bungalows along the shores of the lake, of which that at Barkul is best known for its picturesque view of the lake; the Rājā of Kallikota has a residence at Rambhā and a house on the island of Barakud in the middle of the lake, which commands some most beautiful scenery. A tidal canal connects the lake with the Rushikulyā river in Ganjām and is navigable throughout the year. Large quantities of grain are imported from Orissa across the lake and along this canal, and salt is exported in return. The boats employed are flat-bottomed vessels, which, when loaded, draw less than a foot of water, and are poled against the wind or drift before it under crazy mat sails.

According to tradition, the Chilkā was formed by an inrush of the sea. The legend is that in the fourth century A.D. a strange race came sailing across the sea, and cast anchor off the holy city of Purī, hoping to surprise the temple with its store of jewels and treasure-house of costly oblations. But the priests, having for days beforehand seen quantities of litter from the horses and elephants drifting ashore, fled with the precious image, and left an empty city to the invaders. The disappointed general, enraged at the tell-tale tide, advanced in battle array to punish the ocean. The sea receded deceitfully for a couple of miles, and then, suddenly surging in upon the presumptuous foreigners, swallowed them up. At the same time it flooded a great part of the Purī district, and formed the Chilkā lake. There seems little doubt, however, that the lake was formerly a bay of the sea, which the advance of the riverain delta hemmed in on the north-east, while a spit of sand formed across the mouth and eventually separated it from the sea. The bed of the lake is now being gradually raised by the silt deposit brought in by the rivers, and it appears probable that in time the low mud flats which are pushing their way southwards from the mouths of these rivers will extend over the whole lake.*

Sar lake. The Sar lake is a fresh water lagoon to the east of Purī town, which is formed by a backwater of the Bhārgavī river. This lake is four miles long from east to west, and two miles broad from north to south. It has no outlet to the sea, and is separated from it by desolate sandy ridges. It is utilized neither for navigation nor to any extent for fisheries. The sandy desert that divides it from the Bay is destitute of population, and on the north a few miserable hovels at wide intervals dot its shores. Its waters, however, are used for irrigation when the rainfall proves deficient; and as it is very shallow, a large portion is cultivated with *dālua* rice in the winter months.

* Sir W. W. Hunter, *Orissa*, Vol. I.

Practically all the hills in the district are in the Khurdā sub-division, where they are found in more or less extensive ranges or in detached peaks and blocks, with elevations varying from under 500 feet to 3,115 feet above sea-level. One of these ranges, beginning in Domparā in the Cuttack district and running south-east in an irregular line towards the Chilkā lake, forms the watershed between it and the Mahānadī valley. The eastern faces of the hills are usually rocky and precipitous. The western slopes are easier, and are well covered with earth and jungle, often with beds of laterite and gravel, from which issue good springs of pure water. On the north-west of the Chilkā the hills become bold and very varied in shape, with fertile valleys running far inland between the ridges, and throw out spurs and promontories into the lake, forming island-studded bays. HILL SYSTEM.

The most conspicuous peaks are Solāri in Bānpur, Bhelāri on the south-west boundary of the Khurdā subdivision, and Baithā and Bārunai a mile to the south-west of Khurdā town. Solāri is a group of peaks rising one above another from the flat land near the Chilkā lake, and the other three are saddle-backed hills rising into bare and often inaccessible precipices. There is a splendid tank, believed to be the work of prehistoric builders, on the Solāri hill; and both this and the Bārunai hill contain caves which have been hermitages and places of pilgrimage from time immemorial. Historically, however, the most interesting hills are Khandagiri and Udayagiri, two hills, separated by a narrow gorge, which rise abruptly from the rocky soil near Bhubaneswar, and are honeycombed with cells and cave dwellings cut from the solid rock by the Jains over 2,000 years ago. Among other interesting places in the hills may be mentioned Atri, where there is a hot mineral spring in the midst of a highly cultivated valley, and two picturesque passes at Singheswar on the Ganjām road and at Kurārhmal 5 miles south of Khurdā.

There are a few outliers of the Khurdā hills in the alluvial plains which constitute the rest of the district. They cross the valley of the Dayā at Dhauligiri, an isolated peak, which is famous for the Asoka inscription carved on a great slab of rock at its base, and at Jagadalpur, where there is a line of low hills intersected by the railway. The highest peak in this range is about 500 feet above sea-level and is crowned by an ancient Hindu temple.

The rivers of Purī may be divided into three groups marking three distinct tracts of country, viz., the rivers of the Khurdā sub-division to the north; the deltaic rivers of the alluvial plain in the centre of the district, consisting of the Koyākhāi, its tributaries and offshoots; and a group of three rivers, the Prāchī, Kaduā and RIVER SYSTEM.

far as Padampadā, but during the rainy season only as far as Mātkatpatnā, somewhat below Taknā village. After the first three miles of its course the Kushbhadrā narrows considerably, and the pressure of floods is generally felt, so that breaches are liable to occur anywhere in the embankments on either bank. The Kushbhadrā receives no important contributions from the east; but on the west, at a point 6 miles from the sea, it receives the whole of the drainage of the tract between its own and the Bhārgavī channels. The Dhanuā, with its tributary the Mugai, conveys this large addition of volume to the Kushbhadrā, and the point of junction is said to be the lowest point in the delta. The distance of this point from the sea by a direct line is only 6 miles, but, as the fall is very gradual, the river follows a winding course, and does not reach its destination till it has covered twice that distance.

Dayā. The Dayā river, as already stated, takes off from the Koyākhāi at Sardeipur. It runs due south for 8 miles and then makes a sharp turn westward for 4 miles, and after that continues its course southward for the rest of its length, emptying itself into the Chilkā lake at the north-eastern corner, some 37 miles from its off-take. The river is tidal as far as Bhātparā, but the action of the tide is inappreciable in the flood season. Two small rivers enter the Dayā, the Ganguā just above the village of Kanti, and the Monāguni river a mile or two below Kanās; though small, these streams drain a considerable area, and during the rains add a large volume of water to the Dayā. On the right bank the Dayā is embanked from its off-take as far as Dakshin Nuāgān, two miles above Kanti, and then the country is open to spill until the Teremul embankment is reached opposite the Ghorādihā hills. This embankment is carried on to the outfall of the Monāguni river, but from there to the Chilkā lake no embankment exists. The Teremūl embankment, it may be added, has been abandoned and is in a bad state of repair. An important problem in connection with the Dayā is that the Chilkā lake at its outfall is silting up, owing to the enormous quantity of silt which it brings down. The result is that a large volume of water cannot find a free outlet and overflows into the surrounding country.

Bhārgavī. The Bhārgavī, after leaving the Koyākhāi at Sardeipur, pursues a south-easterly direction for the first 4 miles, then tends to the west for another 4 miles, turning again to the south-east and keeping this course until the village of Torāniā is reached. Here its direction is south-west for 23 miles, when it shoots to the north for 5 miles, travels due west for another

5 miles, and then empties itself into the outfall of the Dayā, breaking up into numerous branches in the last 2½ miles of its course. The Bhārgavī is 53 miles in length, and for all this distance is very much constricted, owing to embankments constructed on either bank close to its channel. In consequence of this, breaches are apt to occur in any portion of the embankments during floods of any intensity, while the growth of jungle and the cultivation of plantain and castor oil plants on any berms that exist have gone on to such an extent as to retard the current materially in time of flood.

The Bhārgavī has several branches, the first of which, the Kanchi river, 4 miles long, takes off at Jankādeipur village and travels south-east, having its outfall in the Sar lake about a mile below Panchmuhāni. When the Bhārgavī is in flood, it relieves the pressure lower down, the spill water entering the Sar lake; and when the flood subsides, this spill returns and escapes again by the Bhārgavī. At its lower end where it enters the Sar lake, the Kanchi meets the Athāra-nullah, which is now one of the principal outlets of the lake. This nullah is 4½ miles long, and is embanked on both sides. The Sunāmuhi is a continuation of the Athāra-nullah, and is nearly 8 miles long; it is embanked on its right bank, and has its exit at the head of the Harchandī river, at which place the Nayā Nadī also has its exit. The Kanchi has one branch, the Dhauriā, which takes off a good deal of the excess water of the Bhārgavī, but not as much as it might, for its bed is greatly silted up. It runs in a westerly direction for 2 miles, and then a small branch, about three-quarters of a mile long, leaves it and joins the Bhārgavī in the 33rd mile. From this point the Dhauriā flows in a southerly direction meeting the East Kaniā river at its outfall into the Sunāmuhi river. Branches of the Bhārgavī.

The East Kaniā is the second branch proper of the Bhārgavī, taking off in the 35th mile of the river. It runs in a south-easterly course for 4 miles, when it joins the Sunāmuhi and the Dhauriā. It is embanked on the right bank and unembanked on the left. The flood-water flows up and down this river during the monsoon months, flowing towards the Sunāmuhi when the Bhārgavī is rising, and towards the Bhārgavī when it falls.

The Nayā Nadī river, the third branch of the Bhārgavī, is an artificial channel taking off from the 40th mile. Running in a south-easterly direction for a distance of 3½ miles, it joins the Sunāmuhi and merges with the latter in the Harchandī river. It was meant to pass the excess flood-water of the Bhārgavī into the Harchandī, but it is so much silted up that it is of little use.

The South Kaniā is the fourth and last of the branches of the Bhārgavī. It leaves that river in its 45th mile, and travelling in a south-westerly direction enters the Chilkā lake 10 miles from its off-take. It is a narrow and winding stream with its head much silted up, the result being that it is not of much use in discharging the Bhārgavī flood-water, and its outfall into the Chilkā is nearly impossible to trace. In high spring tides and during the prevalence of southerly winds, the brackish water of the Chilkā lake is forced up the South Kaniā, doing a certain amount of damage to the soil.

Harchandī. All the branches of the Bhārgavī eventually drain into the Harchandī. This river runs for 10 miles south-west, until it empties itself into the Bay of Bengal by the mouth of the Chilkā lake. Its whole course is through sand, and consequently its bed is considerably silted up and the river has become very shallow. It takes its name from a temple built on the sand about 2 miles from its head. The excavation of this river would do much to relieve the lower part of the Bhārgavī, but owing to the south-west wind that blows steadily from February to June, carrying sand with it, it would be next to impossible to keep the bed clear for any length of time without yearly excavation.

Ratnachirā. The country between the Bhārgavī and Dayā has two chief drainage channels, the Ratnachirā on the south and east, and the Nūna on the north and west. The Ratnachirā has its origin between Mukundpur village on the Trunk Road and Sāinso on the Bhārgavī. It runs due south for 13 miles, and then for another 13 miles flows to the south-west, until it joins the Bhārgavī. It drains the country between the Trunk Road and the Bhārgavī, crossing the road near Satyabādī. It is embanked on its right bank for the last 8 miles of its course, but this embankment has long been abandoned, is full of breaches, and, in places, obliterated. It is an important drainage channel, but its bed is silted up in many places. The Ratnachirā has a branch called the Chingiriā, about 3 miles in length, which enters it 2 miles above its junction with the Bhārgavī.

Nūna. The Nūna rises about 2 miles north of the Ghorādihā hills, and after skirting them, runs a southerly course for 20 miles, then turns due west at Sāhuparā, and falls into the Dayā 2 miles further on. There are also numerous independent creeks connecting it direct with the Chilkā, as well as a small branch connecting it with the Bhārgavī. The mouth of the Nūna is free from silt, and so is its bed for nearly its entire course.

EASTERN RIVERS. The east of the district is drained by the Prāchī, Kaduā and Devī rivers. The Prāchī rises about 2 miles north-west of

Kantāparā village, and travels for 30 miles in a south-easterly direction, draining the country between the Kandal and Kushbhadrā rivers. It carries down to the sea the drainage of the border country between Purī and Cuttack; and it has been surmised that it was formerly the principal drainage channel of the district. It is joined at its mouth by the Kaduā. Prāchi.

The Kaduā river is formed by the confluence of two small streams at the village of Chārigān. It travels due south for the first 5 miles of its course, then turns in an easterly direction for 3 miles, and during the rest of its course to the Bay of Bengal meanders for some 14 miles in a south-easterly direction. It drains the country between the Prāchī and Kushbhadrā, and during high floods receives a good deal of the spill water of the latter river, which overtops its left bank at Nimāparā. Formerly the Kaduā had two channels leading to the sea, one flowing west of the village of Kalumkani and the other joining the Prāchī river below the village of Bandālo. Both these are now silted up, and a third exit has been formed, flowing between the two and joining the Prāchī still further down below Bandālo. In the hot weather months the river dries up above the village of Chotiparā, but below that place it remains deep all the year round. In the rainy months it is tidal as far as Tikarpā, but in the dry season the tide reaches to Kantigrām. Kaduā.

The Devī forms the last part of the great network of rivers into which the Kātjurī branch of the Mahānadī bifurcates. According to a common characteristic of the rivers of Orissa, most of the members of this network reunite as they approach the ocean, and the result is a broad estuary, known as the Devī, which enters the sea a short distance to the south of the boundary between Cuttack and Purī. It is navigable up to Māchgāon by small sloops, which use this channel to obtain cargoes of oil-seeds and rice. It is one of the best tidal channels in Orissa, but owing to the bar of sand at its mouth vessels of large size cannot enter it except at high tide. It has three offshoots—the Godokant, Magarnāl and Kethai. Devī.

The following is a brief account of the most important rivers in the Khurdā subdivision. KHURDA RIVERS.

The Saliā rises in the jungles of the Ranpur State, and after flowing through the Bānpur Māls enters the cultivated tracts of *zilā* Bānpur below the village of Pratāp; it then follows a southerly course, and after crossing the Ganjām road at the 71st mile enters the Chilkā. The total length of the river is about 30 miles; it is fed by several tributaries coming from Saliā.

the Madras Presidency; and as the area of the catchment basin is about 69,000 acres, it conveys a large volume of water into the Chilkā during floods. At present the stream is used to some extent for irrigation purposes, but, as there is no means of retaining it, by far the greater portion of the flood water finds its way into the Chilkā.

Kusumi. The Kusumi rises in the Tributary State of Ranpur, and then flowing along the boundary of Ranpur and Khurdā, enters the latter subdivision near Mundilā, and, taking a south-easterly course, enters the Chilkā lake. There is a large masonry bridge over the river, where it crosses the Ganjām road at the 54th mile. About a mile below the bridge, the river bifurcates in village Kusumi, one branch flowing towards Jariparā and the other going off towards Sāran.

Monāguni. The Monāguni or Madāgni (also called Malāguni) runs through *zilā* Rāmeswar, and is the channel by which almost the whole of the Ranpur State is drained. It is formed by the confluence of two streams close to Saharagai, near the boundary of Khurdā and Ranpur, and further down, near Chanagiri, it is fed by an important tributary, which drains almost the whole of Khurdā on the south of the basin of the Ran river; this tributary also goes by the name of Monāguni just before the main stream joins the Dayā. Another tributary, called the Rajnā, also drains a considerable portion of the Khurdā estate. The Monāguni joins the Dayā river below the village of Balabhadrapur, and is navigable during the rains by small boats and dug-outs.

Ran. The Ran river rises in *kilā* Khurdā and eventually joins the Mahānadī after flowing through the Bānki estate. It is navigable during the rains from the Mahānadī to Bāghmāri on the Kantilo road, 8 miles from Khurdā. An area of 10 square miles in *kilā* Khurdā is liable to inundation from this river when the Mahānadī is also in flood and forces back its waters.

Other rivers. Among other rivers may be mentioned the Kansāri, which has a catchment area of 39,000 acres and is joined by the Champājhar, the Hara with a catchment area of 45,000 acres, the Baghchāl, Ghaguria, Kāni and Sāradā. In *zilā* Kuhuri an important stream is the Mangaljit, which rises in Ranpur and taking an easterly course enters the Chilkā lake near Kāluparā Ghāt railway station. The Kāligiri also rises in the Ranpur State, and flowing through *kilā* Khurdā and the Bānki estate joins the Mahānadī. The Ganguā rises in Cuttack and flowing south of Bhubaneswar flows into the Dayā a little above Kanti. It has two main tributaries, the Barajor and Jori Nullah, which rise in *kilā* Khurdā close to Jajārsingh and join the Ganguā

below Bhubaneswar. The whole of *zilā* Dāndimāl and a great portion of *zilā* Khurdā are drained by these three streams.

PORTS. The only port in the district is Purī, and this is nothing but an unprotected roadstead. It is open for import and export trade from the middle of October to the middle of March, but during the rest of the year, the surf does not allow of ships being laden or unladen. Vessels bound here lie at a distance of about half a mile from the shore in good weather, and all goods are landed through the surf in *masulā* boats.

GEOLOGY. The country near the coast and a broad tract in the north-east of the district are alluvial, but the western portions of the district are occupied by laterite, sandstone, and metamorphic rocks. There is a very small extent of the older undulating alluvium; almost all the eastern part of the district and the country extending from the Mahānadī to the Chilkā lake is perfectly flat, and consists of the newer or delta alluvium. Hills of blown sand extend along the whole coast, and frequently are disposed in two or three principal ranges,—the first close to the shore, the second from one to two miles inland, and occasionally there is another still further from the sea. In some cases these sand hills cover a considerable area, as near Purī, where they are 2 or 3 miles across. When such is the case, they are generally bounded on each side, towards the land and towards the sea, by a low range, 60 to 80 feet high, while other ranges more or less obliterated occur further inland. On the inner range there is almost always vegetation, and it seems to serve as a boundary for the barren land, which is prevented from being covered with grass by sand being continually blown upon it by high winds from the sea. There can be little doubt that each range of sand hills marks an old sea-coast, and it seems probable that the sea has retired gradually, and that the land has been raised, not continuously and uniformly, but at intervals and by interrupted movements.

There is other evidence of the gradual rise of the land. It is probable that the clusters of isolated hills, evidently once islands, which dot the whole of Orissa, have been brought to nearly their present form by denudation of an ancient date; while it seems clear from the laterite conglomerate which is found that a more recent agency has tended to modify their shape. This is not conclusive proof of a recent rise of land, but within the memory of man the tides came further up the rivers. The latter change may be due to the raising of the delta by fluviatile deposits, but it is a noteworthy fact that local tradition asserts that the Black Pagoda, when first built, was on the sea-shore, whereas it is now 2 miles inland, and this tradition is confirmed by

its position on the inner row of sand hills. Apart from this, the small, isolated, steep hills which rise from the plain, taken in connection with the bosses and whale-like ridges which stud the country, present all the features of an upraised archipelago ; and it is probable that, at no very remote geological period, the sea of the western portion of the Bay of Bengal dashed against many a rugged cliff and rolled round clusters of islands in what is now the Province of Orissa.

The greater portion of *pargana* Dāndimāl in the north-west of the district consists of Athgarh sandstone, and is composed of coarse sandstone and conglomerates. To the west these beds appear to rest on metamorphic rocks, and they have a general dip to the east and south-east at low angles not exceeding 5° or 6°. They are surrounded on all sides by laterite and alluvium. At their apparent base to the west is a coarse conglomerate, the pebbles chiefly of quartzite. These rocks contain one band at least of white clay, which is dug up and used for white-washing houses and for other purposes. South-west of the sandstone country and west of Khurdā, there is a broad undulating plain, partly covered with laterite, through which the gneiss rises at intervals. In the extreme west of the district, round Bolgarh and Goriāli, there are two very barren ranges of no great height, running east and west, and formed of compact, rather granitoid gneiss. From this point, whence the boundary of the district turns to the eastward as far as the Chilkā lake, only detached hills occur, all of gneiss, with intervening plains of laterite and alluvium. The group of hills near Chatarmā are of granitoid gneiss ; most of the others are of garnetiferous gneiss with quartzose bands. Such are Khurdā hill and the smaller hills in the neighbourhood, and also the hills east of the Ganjām road between Rāmeswar and Mangalājuri. Precisely similar country extends to the west of the Chilkā lake.

The lake itself is a part of the sea first rendered shallow by deposits from the mouths of the Mahānadī and from silt carried up the Bay round the hills near Ganjām by the violent southerly winds of the monsoon, and then entirely cut off by a spit, formed by the same agency, of sand drifted along the coast. Near the south-western extremity of this spit there is a considerable deposit of estuarine shells, at a height of 20 to 30 feet above the present flood-level of the Chilkā. The shells found, *Cytherea casta* and *Arca granosa*, have not been observed living in the Chilkā, and both are estuarine species not occurring in the sea itself ; but the former is now abundant in the estuary connecting the lake with

the sea. This deposit appears to afford evidence of a recent elevation of the land.*

The sand hills stretching between the fertile rice plains and the sea constitute the only really distinctive feature of Purī from a botanical point of view, and present not a few of the littoral species characteristic of the Madras sea-coast, and unusual in Bengal, such as Spinifex, Hydrophylax and Geniosperum prostratum. The summits of these ridges are for the most part covered with stiff thorny plants; and in some places, especially about the Black Pagoda (Konārak), the surface of the sand is covered by a thick network formed by the interlaced stalks of creeping convolvulus, which is for half the year loaded with large flowers of a bright purple colour. To the north-east, where the Devī finds an outlet, there are numerous tidal creeks fringed with jungle; and the banks of the sluggish rivers and creeks, which wind through the swampy low-lying country near the sea, exhibit the vegetation of a mangrove forest. BOTANY.

In the zone of cultivated land between the sea and the Khurdā hills the usual rice field weeds are met with, while ponds and ditches are filled with floating water weeds or submerged water plants. Near human habitations shrubberies containing various semi-spontaneous shrubs are common. This undergrowth is loaded with a tangled mass of climbing Naravelia, various Menispermaceæ, many Apocynaceæ, several species of Vitis, a number of Cucurbitaceæ, and several Convolvulaceæ. The arborescent portion of these village shrubberies includes the red cotton tree (Bombax malabaricum), Odina Wodier, Tamarindus indica, Moringa pterygosperma, the *pīpal* (Ficus religiosa), the banyan (Ficus bengalensis), the palmyra (Borassus flabellifer) and the date palm (Phœnix sylvestris). The usual bamboo is Bambusa arundinacea. Open glades are filled with grasses, sometimes of a reedy character; sedges are abundant, and ferns are fairly plentiful.

In the Khurdā subdivision there are extensive forests, which lie within what is technically known as the dry evergreen forest zone and comprise *sāl* and mixed forest. In the metamorphic region to the south-west *sāl* (Shorea robusta) is seen at its best, its chief companions being *ablus* (Diospyros melanoxylon), Careya arborea, *āsan* (Terminalia tomentosa) and Buchanania latifolia. In the mixed forest the chief species are Anogeissus latifolia, *jiyal* (Odina Wodier), *kusum* (Schleichera trijuga), and Dillenia

* The Geological Structure and Physical Features of Bānkurā, Midnapore and Orissa, Memoirs, Geol. Surv. Ind., Vol. I; Sketch of the Geology of Orissa, by W. T. Blandford, Records, Geol. Surv. Ind., Vol. V.

pentagyna, while in the north-west Hylia dolabriformis (the ironwood tree of Pegu and Arakan) is common. Of bamboos Bambusa arundinacea and Dendrocalamus strictus are most common. Climbers are numerous, the most noticeable being Bauhinia Vahlii, Milletia auriculata, Entada scandens, and Combretum decandrum. A fuller description of these forests will be found in Chapter VII.

FAUNA.

The carnivora of the district comprise tiger, leopard, bear, hyæna, wild dog, jackal and other smaller species. Tigers are not very common, and chiefly frequent the heavier jungles of the reserved forests in the Khurdā subdivision; one or two, however, occasionally make their appearance in the small patches of jungle scattered over that subdivision, and sometimes take to man-eating. Leopards are plentiful, the numerous low hills dotted over the northern part of the district being their favourite resort. Black bears are common and may be met with on every little rocky hill. Wild dogs are met with only in the reserved forests of the southern range, where they are very destructive to game. Bison are found in the Māl forests; *nīlgai* (Boselaphus tragocamelus) towards the southern boundary of the Khurdā estate; and black buck on the sea coast. *Sāmbar* are common in all the heavier hill jungles, while *chital* or spotted deer (Cervus axis) generally frequent the more open jungle surrounding cultivation. Barking deer and mouse deer are found, but are not numerous. Wild pigs and hyænas are numerous throughout the district.

The game birds of the district include jungle, spur and peafowl, grey partridge, rain button, bustard and bush quail, and snipe in season. Grey duck, comb duck, pink-headed duck, whistling teal, the larger teal and cotton teal are also found, while swarms of the following birds are found on the Chilkā lake and on *jhils* near Bānki and Khandparā—grey-lag goose, bar-headed goose, ruddy sheldrake, the burrow duck, the shoveller, gadwall, pintail, common teal, blue-winged teal, pochard, red-crested pochard, white-eyed pochard, flamingo, demoiselle crane, curlew, golden plovers, stone plovers and waders. Imperial blue pigeon and two kinds of green pigeon are also met with.

Fish.

The Chilkā lake forms a most valuable fishery abounding in fish, chiefly perch and mugils or mullets, besides prawns and crabs. The best fishing grounds are situated along the numerous creeks and channels on the south side near the sea, and round the low uninhabited island known as the Nalabana. Shoals of *hilsā* (Clupea hilisha) are also found in the rainy season near the north-east corner where the Dayā falls into the lake.

This lake, it is said, would form an ideal ground for the propagation of estuarine fish, but it is already largely fished and the introduction of improved methods of capture, without anything being done to increase the supply, can only have a disastrous end and lead to the speedy depletion of its waters. There is, however, ample scope for supplying, even from the present hauls, Calcutta and other important places with fresh fish, prawns and crabs from October to April. Deep sea fishing is carried on at Purī, where large hauls are made, bijram (Madras seir, Cybium guttatum), pomfrets, small soles, etc., being among the fish caught. There is also a small bed of oysters near Mānikpātnā. A fuller account of the fishing industry will be found in Chapter X.

CLIMATE.

The town of Purī, situated on the shore of the Bay of Bengal, enjoys an equable temperature all the year round, the thermometer rarely falling below 70° or rising above 90°. In the hot weather a strong sea-breeze blows up from the south-west and is most invigorating; even in April and May the day is never so hot as to necessitate the use of a punkha. At the close of the rains, however, the climate is a trying one, for the temperature is still high and the atmosphere is laden with moisture. In Khurdā and the hilly tract to the north the climate is drier and the temperature higher. The maximum temperature in the shade, however, rarely reaches 110°, and that only for two or three days; and the thermometer has been known to fall as low as 55°. The crisp cool of the morning, moreover, begins earlier and lasts longer at Khurdā than in other parts of Orissa. From about the middle of February to the end of May, a strong southerly breeze blows up from the sea and prevents the nights from being unbearably hot. After the cessation of this wind the weather is sultry and disagreeable till the rains set in.

Winds.

With the advent of the hot weather in March a strong breeze blows from the south-west and continues till about the end of May. Both April and May are marked by sudden storms known as nor'westers, and the monsoon is usually ushered in by one or more cyclones. The south-west monsoon breaks in June in normal years, and the coast is then inaccessible owing to the violence of the surf. From the middle of September, however, till about the middle of November, the weather is comparatively calm and is broken only by occasional cyclones. The district is directly on the track of the cyclonic storms which cross Orissa during the monsoon season, but as a rule is not liable to suffer from the devastating cyclones which have given the Bay of Bengal such an evil reputation; because these usually occur in May, October

and November, and if they move into the north of the Bay, the tendency is for them to recurve towards the Arakan or Bengal coast.

Temperature. On the whole, the sea breezes ensure an equable climate. Even in April and May the average maximum temperature is only 89°, while the mean temperature falls from 86° in the hot months to 84° in the monsoon season and to 77° in February. Humidity ranges from 75 per cent. of saturation in December to 86 per cent. in August.

Rainfall. There is generally a sprinkling of rain with cloudy weather during the early part of November and the last week of December, but on the whole only a fraction of an inch falls monthly in the cold weather. During March and April a few nor'westers usually bring a little rain, and in May cyclonic storms occasionally occur, with which weather of the south-west monsoon type prevails: the normal fall for the latter month is 3·13 inches. From June to September the monsoon is in full force, and the rainfall averages 8·17 inches in June, 10·23 inches in July, 12·05 inches in August and 9·82 inches in September, while in October, when it depends on causes similar to those operating in May, it is 7·18 inches. Statistics of the rainfall at the various recording stations are given below for the cold weather, hot weather and rainy season, the figures shewn being the averages recorded in each case.

STATION.	Years recorded.	November to February.	March to May.	June to October.	Annual average.
PURI ...	42–46	4·47	4·29	47·16	55·92
KHURDA ...	30–31	2·92	5·14	52·62	60·68
BANPUR ...	21–22	4·25	3·95	46·96	55·16
GOP ...	14–16	4·58	5·21	48·07	57·86
PIPLI ...	12–15	2·21	4·78	50·18	57·17
SATPARA ...	10–11	3·23	4·30	39·65	47·18
AVERAGE ...	...	3·61	4·61	47·44	55·66

CHAPTER II.

HISTORY.

PREHISTORIC PERIOD.

In prehistoric times the hilly tract to the north appears to have been inhabited by savage tribes differing from those occupying the lowlands near the sea, while the intervening plains were in the possession of races somewhat more civilized. Along the sea-board were settlements of fishers and boatmen, the descendants of whom, the Kewats, still follow the ancestral calling and perpetuate the name of the Kevatas, which has been traced to very early times, being mentioned in Asoka's fifth pillar edict. Of the hill tribes some descendants still survive in the Savars, who now occupy a degraded position among the servile castes. They have been identified with the Suari of Pliny and the Sabarai of Ptolemy;* and they are mentioned in several places in the Bhagavatī, the oldest sacred literature of the Jains, where their language is referred to as one of the tongues of the barbarians (*Mlechchha*).† They were detested by the Aryans, according to whom they were goblins, devils and man-eaters, and to this day they, like the Pāns and other very low castes, are excluded from the sacred courts of Jagannāth. They themselves say that they were originally a wandering tribe roaming through the hills of Orissa and living on the fruits of the forest; and the memory of this primitive state is almost the only tradition which they preserve. The Pāns are also probably the descendants of another of these wild tribes. Everywhere they rank among the lowest classes; they are employed as village drudges even by such tribes as the Khonds, who in the days of human sacrifices selected a Pān boy as the best sacrifice which could be offered to mother earth. All these facts seem to indicate that they were the original occupants of the soil, who were dispossessed and reduced to slavery by other tribes.

This chapter has been written in collaboration with Bābu Monmohan Chakravarti, M.A., B.L., M.R.A.S., Assistant Superintendent, Gazetteer Revision, Bengal.

* Cunningham, *Anc. Geog. India*, p. 509; Do., Arch. Surv. Rep. India, ix, 1877.

† Weber, Sacred Literature of the Jainas, translation, *Ind. Antiquary*, Bhagavatī, Angas, v, vi & x; Upangas, i & iv.

Utkalas and Odras.

The intervening plains and uplands appear to have been held by tribes on a somewhat higher level of civilization. From the scanty references made to them in later literature, it would seem that two of these tribes were known as Odras and Utkalas, who in course of time spread southwards to Kalinga. The Utkalas became absorbed in the larger tribe of Odras, though their name is found attached to the land in Sanskrit works at least before the sixth century A.D.* It is noticeable that Tapussa and Bhallika, the first lay disciples of Buddha, are said to have been merchants from Utkala, who were travelling to Madhyadesh with 500 carts when they met Buddha at Bodh Gayā.†

Indo-Aryan settlers.

It seems probable that before the third century B.C., several of the Indo-Aryan castes, such as Brāhmans, Kshattriyas, Karans and others, had migrated to Orissa, which then formed part of Kalinga and was regarded as an impure country inhabited by fallen races. Thus, in the Baudhāyana Dharma-Sūtra it is laid down that the man who has visited Kalinga must offer a sacrifice as a penance;‡ the Mahābhārata says that pilgrims should avoid Kalinga and that the Kshattriyas settled there had become outcastes;§ while a similar statement is made in the Manu-Samhitā regarding the Kshattriyas who lived among the Odras.‖ These references appear to point to the migration of several Indo-Aryan castes, and among them there must have been Brāhmans. The Māstāns and the Sāruās are probably the descendants of these early immigrants; they call themselves Brāhmans, and wear the sacred thread, though they neglect the nine *sanskāras* or ceremonies incumbent on Brāhmans, and have taken to forbidden occupations, such as cultivating with their own hands, selling vegetables, etc.

EARLY HISTORIC PERIOD. Kalinga.

As Orissa formed part of Kalinga before the conquest of Asoka, its history is merged in the history of that country. Kalinga extended, according to the Mahābhārata, southwards from the junction of the Ganges with the sea;¶ and, according to Pliny, stretched as far south as the promontory of Calingon, *i.e.*, Coringa at the mouth of the Godāvari.** It was an extensive, populous and civilized kingdom. Some idea of its teeming population may be gathered from rock edict XIII, which

* *Raghuvansa* of Kālidāsa, iv, verse 38.

† *Mahāvagga*, i. 4, 2.

‡ I. 1, 2, 14-15.

§ Karna-parvva, ch. xliv, 42; Anusāsana-P°, ch. xxx, 22-3; cf. Adi-P°, ch. ccxv, 10.

‖ Ch. x, 43-44.

¶ Vana-parvva, ch. cxiv, 2-3.

** Cunningham, *Anc. Geog.*, p. 517.

says that, when it was conquered by Asoka, 150,000 persons were carried away captive, 100,000 were slain, and many times that number perished. The evidence of the high standard of civilization and prosperity attained in Kalinga is equally striking. Elephants were specially bred for the royal forces, of which they formed a prominent part;* diamonds of an unique kind were quarried and exported;† medicine was carefully studied, giving rise to a separate system of measures;‡ cloth was manufactured and exported in such quantities that Kalinga became the word for cloth in old Tāmil; and frequent sea voyages were made to countries outside India, on account of which the Indians came to be called Klings in the Malay Peninsula.

Asoka's reign. As the result of the bloody war mentioned above, Kalinga with Orissa was incorporated in the empire of Asoka in 262 or 261 B.C. In this district Asoka commemorated his rule by inscribing at Dhauli hill rock edicts I—X and XIII, in which he gave an exposition of his ethical system and principles of government. Besides these general edicts, he also inscribed two edicts, known as the Kalinga edicts, in which he laid down principles for the administration of the newly conquered province and of the wild tribes dwelling on its borders: the first edict, called by Mr. Vincent Smith the Borderer's Edict, dealt with the duties of officials to the border tribes, and the second, called the Provincials' Edict, summarized their duties to the more settled inhabitants. These edicts illustrate clearly the methohs of administration followed in this frontier province and shew that it was considered necessary to place it under a Viceroy stationed at Tosāli. Tosāli, to the officers in charge of which the Kalinga edicts were addressed, was probably some place close to the modern Bhubaneswar, which is not far off from Dhauli and the ancient caves of Khandagiri, and from its upland position, commanding the bifurcations of the rivers, was well fitted for the site of the capital of the Viceroy.

Maurya rule. Under the rule of the Mauryan Emperors Orissa must have been brought into closer relations with Northern India, and its inaccessibility, to some extent, removed by roads lined with banyan trees and mango groves, with wells and rest-houses, and by the arrangements made for the safety of Government messengers and travellers. These measures naturally facilitated an influx not

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* *Mahābhārata*, Sabhā-P°, ch. lii, 18, 20-1; Bhishma-P°, ch. xviii, 32-4, liv, 40-3; Drona-P°, xlv, 21-2, xci, 32; Karna-P°, xxii, 3; Periplus, *Erythr. Mar.*, 362; *Raghuvansa*, iv, 41, vi, 54.

† *Brihat-Samhitā*, ch. lxxx, 7.

‡ *Charaka-Samhitā*, Kalpasthāna, ch. xii, 105.

only of officials but also of traders and pilgrims, some of whom eventually settled in the land. Hence in the Mahābhārata,* one finds later verses declaring that there were good men in Kalinga, and that *tīrthas* existed there, which show that the ban laid on travelling in that country had been withdrawn.

It seems at least certain that, during the rule of the Mauryan Emperors, a number of Jains settled in the district, for the sandstone hills of Khandagiri and Udayagiri are honey-combed with their hermitage caves, some of which bear inscriptions in the Brahmī character of the Mauryan age. They all appear to have been made for the religious use of the Jains and to have been used by Jains and monks for many centuries. This seems evident from the inscription on the Hātīgumphā or elephant cave, which opens with the usual benedictory formula of the Jains, while another inscription in the Swargapurī cave declares that, by the grace of the Arhats, it was made by the chief queen of the king of the country.

Reign of Khāravela.

The Hātīgumphā inscription is even more valuable as an historical record, for it shows that, on the downfall of the Mauryan empire, Kalinga revolted and became an independent kingdom. This inscription, which is ascribed to 158—153 B.C., contains a record of the career of king Khāravela, entitled *Mahāmeghavāhana*, *i.e.*, one whose elephant is as big as a large cloud. Khāravela evidently made Kalinga a powerful kingdom, and his invasion of Magadha indicates that he had become not only independent but aggressive; for this expedition into the heart of the empire led him to the capital, Pātaliputra (Patna), on the banks of the Ganges, and compelled its Emperor to sue for peace and acknowledge his independence. Besides this account of his military prowess, the inscription records the pious deeds of the king, his repair of an alms-house, his gifts to Brāhmans and Arhats, the musical entertainments he provided for the people, the construction of pillars and caves, etc. The inscription also affords good grounds for the belief that the king and his family had a leaning towards Jainism; and his successors were apparently also adherents of that religion. The capital of this monarch was at Kalinganagari, which it has been suggested was probably somewhere near Bhubaneswar, but perhaps closer to the sea, as it is said to have been destroyed by a tidal wave.†

Andhra rule.

It is not known how long this dynasty lasted or by whom its kings were succeeded, but it is probable that in the second century A.D. Kalinga, including Orissa, acknowledged the suzerainty

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* Vana-P°., ch. lxxxv, 114; Karna-P°., ch. xlv, 45.

† Report, Arch. Surv., Eastern Circle, 1905-06.

of the Andhras, to whose active influence the introduction of Buddhism may perhaps be ascribed. The Tibetan chronicles have preserved a tradition that the king of Otisha was converted to Buddhism, with 1,000 of his subjects, by Nagarjuna, who is believed to have flourished, about 200 A.D., at the court of the Andhras; and the conversion of the people would naturally have been facilitated by the royal example.

MEDIÆVAL PERIOD. From this time there is a gap of several centuries until the beginning of the seventh century, when we know from an inscription that Southern Orissa had been subdued by Sasānka, the powerful king of Bengal. A few years afterwards, it was conquered by Silāditya Harshavardhana of Kanauj, during whose reign it was visited by the Chinese traveller Yuan Chwang (sometimes called Hiuen Tsiang) in 640 A.D. He gave a short but graphic account of the country (Kung-yu-to) in his Travels.* This country, he remarked, was about 1,000 *li* (a *li* being $\frac{1}{5}$th to $\frac{1}{6}$th of a mile) in circuit, with a capital 20 *li* in circuit. A hilly country bordering on a bay of the sea, it contained some tens of towns, stretching from the slope of the hills to the sea. The climate was hot; the harvests regular; and being on the sea-side it contained many rare and precious commodities. It produced large dark-coloured elephants, capable of long journeys. The currency was in cowries and pearls. The people were tall, black-complexioned, valorous, not very deceitful, with some sense of propriety. Their language was the same as that of India, but their manner of speaking it different. They were not Buddhists, having Deva temples 100 in number and of Tirthikas more than 10,000.

The description of the country bordering on a bay, of the towns stretching from the hills to the sea, and of the religion being strongly Brahmanical, agrees perfectly well with the situation and the religion of Purī district. The word Kong-yu-to also closely resembles Kongoda, Kongeda or Kaingoda, varying forms of a name given to a tract of country in several copper-plate inscriptions recently discovered in the Khurdā subdivision and the Ganjām Tributary States.† Its capital should probably be identified with the old Tosāli or with mediæval Bhubaneswar, the centre of Saivism.

Kesarī kings. On the death of Silāditya, his empire was dismembered, and according to the Mādalā Pānji or palm-leaf chronicles of the temple of Jagannāth, Orissa was under the K[illegible]ri or Lion dynasty from the 7th to the 12th century A.D. The

* *Travels of Yuan Chwang*, Mr. Watters, II, 196-7.

† *Epigr. Ind.*, vi, 136, 144.

very existence of this dynasty is denied by several scholars, but Bābu Monmohan Chakravarti points out that there are many good reasons for maintaining that a line of kings with the title Kesarī actually existed. Thus, in the Bhakti-bhāgavata Mahākāvyam, a Sanskrit poem of 1409-10 A.D. which gives a brief history of Orissa, it is distinctly stated that the Kesarī kings preceded the Gangas, and that Udyota Kesarī was one of them; two inscriptions of the time of Udyota Kesarī have been discovered, one in the Nabamuni cave on the Khandagiri hill and the other in a temple at Bhubaneswar.* He also points to the fact that in the Japanese edition of the Chinese Tripitaka is a translation of a part of the Buddhist Buddhāvatamsaka Sūtra, made by a monk in 796-98 A.D. on a copy of the Sūtra which was sent as a present to the Emperor of China by the king of U-tcha (Odra), and that the name of this king in the letter of presentation may be read as Subhakara Kesarī.† Another Kesarī king of Orissa, Karna Keśarī, is mentioned in the commentary of the historical poem Rāmapāla-Charitam as having been defeated by Jayasingh, king of Dandabhukti (Bihār): both the poem and the commentary are believed to be by the same author, probably a contemporary of the hero of the poem, Rāmapāla, king of Magadha, who flourished in the latter half of the 11th century.‡ According to the Bhubaneswar inscription, there were five Kesarī kings, the first being Janmejaya and the last Udyota Kesarī, who was king of Kalinga and defeated the Simhalas, Chodas and Gaudas. The palm-leaf chronicles attribute most of the great temples at Bhubaneswar to this line of kings; and this, if true, must place it among the important dynasties of India.

On the other hand, the reliability of the Mādalā Pānji or annals of the Jagannāth temple is completely denied by other authorities. "None of the records," writes Dr. Bloch, "can be relied upon. Mr. Fleet has, I think, conclusively proved that up to the conquest of Orissa by the Ganga king Chōdaganga the annals contain nothing but pure fiction, and that they cannot be used for historical purposes.§ The long line of Kesarī kings, who are said to have ruled over Orissa for many centuries and to have built the principal shrines at Bhubaneswar, may be regarded as a later fabrication, containing nothing historical, except a dim reminiscence of two actual kings of Orissa, Yayāti and

* For the cave inscription, see the article on Khandagiri in Chapter XVI, and for the Bhubaneswar inscription, see J.A.S.B., VII, p. 558, *et seq.*

† This fact, but not the name, is mentioned in Mr. Watter's notes on *Yuan Chwang's Travels*, 1906, Vol. II, p. 196.

‡ *Proceedings, A.S.B.*, March 1900, p. 72.

§ *Epigraphia Indica*, Vol. III, p. 334, *et seq.*

Janmejaya, but even these have been entirely misplaced as regards chronology. I do not think that the name of Uddyota Kesarī can be used as an argument to show that kings of the Kesarī line actually existed. The word *kesarī* simply means "lion," and I have met with the corresponding name Uddyotasimha in two mediæval Buddhist dedicatory inscriptions, which I discovered at Kispā, in the district of Gayā. There is, moreover, no other name in the list of this king's ancestors formed in the same way, while I am unable to verify the statement that Kolāvatī, the queen of Uddyotakesarī, is mentioned in the Purī temple records.* The Mādlā Pānji list also omits the name of Uddyotakesarī.

"The history of Orissa in mediæval times is broken by a long gap, which it is as yet impossible to fill. We know, however, that during the tenth and eleventh centuries A.D. Orissa was ruled over by kings of the lunar race, whose names alternate between Bhavagupta and Sivagupta, the first two of whom bear also the surnames of Janmejaya and Yayāti. To this line also belonged Uddyotakesarī, whose queen, Kolāvatī, built the temple of Brahmeswar. The names Bhavagupta and Sivagupta both signify 'protected by Siva,' and we may conclude from them that the kings who were thus called were worshippers of Siva. Now, as Bhubaneswar is the great stronghold of Siva-worship in Orissa, in opposition to the Vishnu-worship in the Padmakshetra or Purī, and to the Sūrya-worship in the Arkakshetra or Konārak, one may venture to assume that Bhubaneswar owes its importance as such to those very kings of the lunar race who ruled over it in the tenth and eleventh centuries A.D., and who were, as we have inferred from their names, devoted to Saivism." †

However this may be, the number and magnificence of the remains at Bhubaneswar and elsewhere are evidence of a wealthy and highly civilized kingdom. The art of architecture and sculpture must have been well developed to enable such huge structures to be designed and constructed; and the skill and resource both of builders and masons are clearly shown by the fact that they were able to move and lay in place, without mortar, such gigantic stone blocks, and to produce the vigorous and often exquisitely carved figures, foliage and arabesque patterns, which lend a charm to the carvings adorning these shrines. These stately temples shew the hold which Hinduism had obtained in Orissa by this time; and no trace is found of the Buddhism

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* *Journal Asiatic Society of Bengal*, Vol. LXVII, 1898, Part I, p. 377.

† Report. Arch. Surv. Ind., 1902-03.

which, according to tradition, was introduced a few centuries earlier. At the same time, Jainism appears to have continued to retain its hold on the affections of the people or to have had a revival, for in the caves at Khandagiri and Udayagiri we find inscriptions and rock-cut images of Jain saints or deities dating back to the same period.

Eastern Ganga kings.

In the beginning of the 11th century, the Cholas, who had established a great empire in the Deccan, began to extend their power over Orissa; but their conquests do not appear to have left any permanent mark on the country, being merely brief but successful expeditions. At the end of that century it was effectually subdued by the Eastern Gangas of Kalinganagara (the modern Mukhalingam in the Ganjâm district), and the rule of these monarchs lasted till 1434-35, the dynasty including altogether 15 kings.* Of these by far the most powerful was Chodaganga, who extended his dominions from the Godāvari to the Ganges, and built the famous temple of Jagannāth at Purī in the first half of the 12th century. Another of the Ganga kings, Narasinha I (1238—64), is known to posterity as the builder of the beautiful temple of Konārak, which he dedicated to the sun-god Arka at Konā; while the temple of Megheswar at Bhubaneswar was erected by a general and councillor of one of his predecessors, Ananga-bhīma, about 1200 A.D.

Muhammadan raids.

Soon after this, Orissa was exposed to the fury of Musulmān invaders. The first incursion occurred in 1205, when Muhamad-i-Shīrān, an officer of Bakhtiyār Khiljī, burst down upon the country, and this incursion was followed by many others. In an inscription at Chāteswar in Cuttack, the founder, a Brāhman minister of Ananga-bhīma Deva, claims to have fought with Yavanas, by whom he probably meant the Muhammadans under Ghiās-ud-dīn Iwaz, the fourth Bengal Sultān, who, according to Muhammadan historians, carried his arms into the territory of the Rājā of Jagannāth, which had never before been subdued by the hosts of Islām, and compelled him to pay tribute. There was no effectual conquest, however, and the Hindus of Orissa managed to hold their own. The *Tabakāt-i-Nāsiri* records in 1244 first a raid made by the army of Orissa, and then a counter raid of the Bengal king, which ended with his defeat by the local levies; in 1245 the Oriyās retaliated by marching northwards, besieged Lakhnautī (Gaur), and only raised the siege on the arrival of reinforcements from Oudh; and between 1247 and 1258 there were three battles between the Oriyās and the Muhammadan forces

* *Eastern Ganga kings of Orissa,* M. M. Chakravarti, J.A.S.B., 1903, p. 92 *et seq.*

under Ikhtiyār-ud-dīn Yuzbak, Sultān of Bengal. In the last of these battles the Bengal king was defeated, but next year he again led his army to the south, and captured and sacked the capital.

The object of most of these raids, and of subsequent raids, was to secure the elephants for which Jājnagar, as the Muhammadan chroniclers styled Orissa, was famous. A foray of the Bengal Sultān, Tughril Khān, in 1279 or 1280 resulted in the capture of a great number of these animals ; in 1323 Ulugh Khān, the son of the Delhi Sultān, Ghiās-ud-dīn Tughlik, took away 40 of them ; and similar results followed the inroads of the Bāhmani Sultān, Firoz, in 1412, and of Hushan-ud-dīn Hoshang, the king of Mālwā, in 1422. Not the least notable of these invasions was that of the Delhi Emperor, Firoz Shāh, in 1360-61. Leading his forces in person, he subdued Orissa, occupied the royal residence at Cuttack, and spent several days hunting elephants. When the Oriyā king sent envoys to sue for peace, he ironically replied that he had only come to hunt elephants and was surprised that, instead of welcoming him, the Rājā had taken flight. Finally, the latter made him a present of some elephants and agreed to send a certain number annually as tribute. The Emperor then marched back to Delhi, carrying off with him, according to Sirāj, the sacred idol of Jagannāth.

Solar dynasty.

On the death of the last Ganga king, his minister, Kapilendra Deva, seized the throne and founded the Sūryavansa or solar dynasty (1435).* He found the fortunes of his kingdom at a very low ebb, but succeeded by constant wars in extending its limits till it stretched from the Ganges to the Pennār. In Bengal Nāsir-ud-dīn Mahmūd Shāh was striving to keep up a tottering throne, and here the Oriyās extended their frontier up to the Ganges. In the south, Kapilendra overran the country as far as the Krishnā (Kistna), wrested it from the petty ruling chiefs and then proceeded against the kings of the first Vijayanagara dynasty, who were harassed by internal revolt and bloody wars with the Bāhmani Sultāns. Taking advantage of their troubles, the Oriyā king annexed the east coast south of the Krishnā as far as Udayagiri near Nellore, and then successfully resisted the attempts of the Bāhmani Sultāns to crush him, ravaging their territories up to Bidar in 1457. Energetic as was his foreign policy, he showed no less vigour in his internal administration. One of the earliest measures of his reign was to remit the *chaukīdāri* tax paid by Brāhmans, to abolish the tax on salt and cowries, to stop the resumption of waste and pasture lands, and to issue orders that all

* *The last Hindu kings of Orissa*, M. M. Chakravarti, J.A.S.B., 1900, p. 180, *et seq.*

the chiefs in Orissa were to work for the general good on pain of banishment and confiscation of their property. He was also a royal patron of Vaishnavism and richly endowed the temple of Jagannāth at Purī.

On the death of Kapilendra in 1470, a civil war ensued, each of his sons claiming the throne, but finally Purusottamadeva overcame his rivals. This king extended the kingdom far to the south, and in the confusion which prevailed on the overthrow of the Vijayanagara dynasty, invaded their country, retiring with a magnificent booty, including the image of Sākshigopāla, which is now at Satyabādī in this district. His son, Pratāparudradeva, ascended the throne in 1497, and had at once to march to the north to repel an invading army sent by the king of Bengal, Husain Shāh; and 12 years later he had again to drive out another force which advanced under Ismail Khān, a general of Husain Shāh, who sacked Cuttack and successfully stormed the holy city of Purī. In the south Pratāparudradeva was engaged in constant wars with the kings of the second Vijayanagara dynasty, the struggle ending with the cession of all the territory south of the Krishnā by the Oriyā king. His kingdom was still further reduced by the loss of the tract between the Krishnā and Godāvari in 1522, when Kulī Kutb Shāh, the founder of the Golconda dynasty, drove out the Oriyā army.

Bhoi dynasty.

The Solar dynasty did not long survive the death of Pratāparudradeva. His powerful minister, Govinda Bidyādhara, killed his two sons, and in 1541-42 seized the throne. The short-lived Bhoi dynasty which he established only lasted till 1560, and the few years it covered were spent in civil war. First Raghubhanja, the nephew of Govinda, revolted, but he was soon defeated and driven out of the country by his uncle. On the death of Govinda's son, Chakā Pratāpa, whose unpopular reign ended about 1557, the minister, Mukunda Deva, rebelled,* and after killing the two last Bhoi kings and defeating Raghubhanja, who had returned at the head of a Bengal army, secured the throne in 1560.

Mukunda Deva.

Mukunda Deva, who was a Telugu by birth, was the last independent Hindu king of Orissa, which at this time was in danger from its powerful neighbours both on the north and south. In 1564 Ibrāhim,. the Golconda king, was eager for aggrandizement, and in Bengal Sulaimān Karānī was equally anxious to extend his dominions by annexing Orissa. In 1564-65 Mukunda Deva concluded a treaty with the Emperor Akbar,†

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* *Akbarnāmā*, Elliot's History of India, vi, 88.

† *Tabakāti Akbari*, Elliot, v, 299; Al Badāoni's *Muntākhabut Tawārikh*, Lowe's transl., pp. 77-78; and *Akbarnāmā*.

which was intended as a counterpoise to the ambition of the Afghāns in Bengal, but this measure did not long help the Oriyā king. In 1567 Ibrāhim conquered the country as far north as Chicācole; and next year Sulaimān Karānī, finding Akbar fully occupied by wars in the west, sent his son Bayazid through Jhārkhand, and he attacked Mukunda Deva on the banks of the Ganges and forced him to take refuge in the frontier fort of Kotsamā. A part of his force under his Afghān general, Illāhābād Kālāpahār, then quickly marched southwards through Mayūrbhanj, defeated the king's deputy, and ravaged Orissa. At this juncture, one of the Oriyā chiefs raised the standard of revolt, and hearing of this, Mukunda Deva hurried south to save his kingdom, but was defeated and slain by the rebel forces, whose leader was in his turn killed by the Muhammadan invaders. Raghubhanja escaped from the prison in which he had been confined by Mukunda Deva, and attempted to secure the empty throne, but after some four months' desultory fighting, his death left the Afghāns masters of Orissa (1568 A.D.).

Religious movements.

Of the internal state of the country during these five centuries of Hindu sovereignty, we have unfortunately very little record. Both Buddhism and Jainism were neglected by the Ganga and Solar kings, and, if the palm-leaf records can be believed, the followers of those religions were persecuted by the former line. The Gangas did not, however, neglect the older Saiva worship; the temples of Megheswar at Bhubaneswar and of Chāteswar in Cuttack were built during their rule; and, though they did not build any temples themselves, their rich gifts to the shrines at Bhubaneswar shew that they continued to be patrons of Saivism. At the same time, they seem to have been catholic in their religious tastes, as the great fane of Jagannāth at Purī and the massive sun-temple of Konārak were built by them. The Sūryavansa kings followed in their foot-steps and liberally endowed the Purī temple. The reign of Pratāparudradeva, the last of this line, though disastrous to the temporal fortunes of the kingdom, was one of great religious activity, owing to the spread of Vishnuite doctrines. In 1510 Chaitanya, the great apostle of Vaishnavism, visited Orissa and there devoted the rest of his days to the propagation of the faith. He is said to have converted the king and several of his officers, but his preaching was not confined to the court, while the purity of his life and doctrines made a lasting impression on the people generally. A revival of Buddhism is also said to have taken place towards the close of the Hindu rule; according to Kern,* "the light of the Law blazed anew for

* H. Kern, *Manual of Indian Buddhism*, 1898.

a moment about the middle of the 16th century under the Hindu ruler, Mukunda Deva Harischandra, until, owing to the conquest of the country by the Musalmān Governor of Bengal, it was extinguished." This view, however, is not generally accepted.

MUHAMADAN CONQUEST.

During the Afghān conquest Purī did not escape. The town was besieged and captured, and the image of Jagannāth was burnt; the zealous Badāoni, indeed, claims that Sulaimān Karānī made the place a *Dar-ul Islām.* After bringing the conquest to a close, Sulaimān Karānī took his departure, making his Vizier, Khān Jahān Lodī, Viceroy of Orissa with headquarters at Cuttack, and later on Kutlu Khān Governor of Purī. The Oriyās soon after his departure broke out in revolt, but Sulaimān marching southwards at the head of an Afghān army quickly succeeded in re-establishing his supremacy.

On his death in 1573, his son, Dāūd Khān, threw off allegiance to the Emperor of Delhi, and when driven out of Bengal by the forces of Akbar, fled to Orissa. The imperial forces under Munim Khān and Todar Mal followed hard after him and compelled him to give battle at Takaroi or Mughalmāri in 1575. The battle ended with his utter defeat, and Munim Khān, marching on to Cuttack, concluded a treaty by which Dāūd Khān was allowed to retain Orissa as a fief under the Mughal Emperor (1575). It was on this occasion that the victorious Musalmān, struck with amazement at the sight of Bhubaneswar, its lofty temples of stone, and its crowds of Brāhmans, exclaimed—"This country is no fit subject for conquest or for schemes of human ambition. It belongs entirely to the gods and is one great region of pilgrimage throughout."

Afghān revolts.

Munim Khān, who had removed his headquarters to Gaur, died there during the rains of 1575 with many of his officers, and Dāūd Khān revolted and overran Bengal. But next year in a great battle at Agmahal the Afghāns were defeated, and Dāūd Khān was captured and slain. Orissa became nominally a province of Akbar's empire; but the Mughals had not established their rule securely, and the Afghāns were in frequent revolt. In 1582, taking advantage of the military revolt of the Amirs, they sallied forth from the hills in which they had taken refuge, recaptured the province, and under the leadership of Kutlu Khān, extended their sway as far north as the Rupnārāyan river. In the beginning of 1584 Kutlu Khān was defeated, but shortly afterwards the Governor of Bengal, weary of the fight, made a treaty with him, by which Orissa was relinquished to the Afghāns on condition that they retired from Bengal and acknowledged themselves as tributary. In 1590 the Emperor Akbar appointed his great

Hindu general, Rājā Mān Singh, Governor of Bihār; and one of the first steps taken by the new Viceroy was an expedition in 1591 to recover Orissa from the Afghāns. Kutlu Khān died at this time, and the Afghāns sued for peace, opening the negotiations by making Mān Singh a present of 150 elephants. They agreed to acknowledge the suzerainty of Akbar, to stamp coin in his name, and to prefix his name to all public edicts on condition that they were allowed to retain their *jāgīrs*. Finally, "in compliment to the Rājā, they agreed to give up to him the temple of Jagannāth and his domain, held sacred by all Hindus. The latter article highly pleased the Rājā and his Brāhman councillors."* For a short time this treaty was observed by both sides, Miyān Isā Khān, the *vakīl* of Kutlu Khān, being able to keep the Afghāns in check, "but at the end of two years that able man quitted this transitory world, and the covetous Afghāns seized upon the rich and sacred territory of Jagannāth. This proceeding was considered as sacrilege by the pious Rājā, and he requested the Emperor's permission to exterminate the Afghāns from that province."* In a decisive battle fought on the banks of the Subarnarekhā towards the end of 1592 he defeated the Afghāns, forced them back to Cuttack, and having compelled them to make their submission, sent the Emperor 120 elephants, that he had taken from them, as proof of his victory.

But the Afghāns, though defeated, were not crushed. According to Stewart, they again rebelled next year, made a raid into Bengal and sacked the royal port of Sātgāon. Mān Singh again took the field, the Afghāns retired to their *jāgīrs* in Orissa, and "peace was once more restored to that unhappy province, the inhabitants of which had been so often plundered and their fields destroyed by contending armies."* This peace did not last long. In 1599 the Afghāns, taking advantage of the absence of Mān Singh and the death of his son and Deputy Governor, Jagat Singh, again rose under Usmān Khān, defeated the imperial troops and overran the country as far north as the Subarnarekhā. Mān Singh, who was then engaged in a campaign in Ajmer, at once returned and in 1600 defeated Usmān Khān at Sherpur Atai near Surī in Bīrbhūm. Usmān Khān once more sallied forth in 1612 with an army of 20,000 horse. After a fierce struggle he was killed, his troops fled in disorder, and Shujāat Khān, the leader of the Mughals, entered Orissa as a conqueror. This defeat of the Afghāns virtually ended the struggle between them

* C. Stewart, *History of Bengal*, 1847.

and the Mughals, and Orissa remained a Province of the Empire till 1751, when it passed to the Marāthās.

Bruton's visit.

Shortly after the final establishment of the Mughal rule we have a quaint but interesting record of Purī as it appeared to the first Englishman who ever visited it. This was William Bruton, quartermaster of the good ship Hopewell, who with a few companions came to Cuttack in 1633 from Masulipatam. He thus describes his visit in a "Brief Relation of the Great City of Jaggarnat." "The fifth day of November (1633) I was sent about the Companies business, to the great city of Jaggarnat; and I travelled this day to a town called Madew, and I lodged all night in a pagod or pagado. The sixth day I, William Bruton, travelled eight course, which is thirty-two miles English, and came to a town named Amudpore, where I found, met together, of men, women, and children, more than three thousand; and all of them were travellers and rangers of the country, having no residence, but are called Ashmen (because they cast ashes upon themselves); also they are called Fackeires, which are religious names given to them for their supposed holiness, but indeed they are very rouges, such as our gypsies are here in England, when they see their time and opportunity to put roguery and villainy in practice: at this town I made no great stay, for I had a good charge about me of the Company's.

"The seventh day of November in the morning, about two of the clock, I hasted from Amudpore, over a passage, and so for Jaggarnat, which was ten course between, that is, forty miles English: so about the hour of four in the afternoon I drew near to this great city of Jaggarnat, to which I passed over a great stone causeway, on either side whereof was a very goodly tank to wash in; this causeway was about half a mile in length: then as I came to the west end of this city, I entered into a very fair place for situation, furnished with exceeding store of pleasant trees and groves, and on either side of the way tanks of water, and pagods in the midst of them. From thence I passed up into the high street, where I was entertained by a bramin (which is one of their religious men or idolatrous priests); but let his religion be what it would, into his house I went, and there I lodged all the time of my stay there.

"The eighth day of November, in the morning, after I had gone about the affairs that I was sent to do, I went to view the city in some part, but especially that mighty pagado or pagod, the mirror of all wickedness and idolatry: unto this pagod, or house of Satan (as it may rightly be called), belong nine thousand bramins or priests, which daily offer sacrifices unto

their great god Jaggarnat, from which idol the city is so called; and when he is but named, then all the people in the town and country bow and bend their knees to the ground, as the Moabites did to their idol Baalpeor: here they also offer their children to this idol, and make them to pass through the fire; and also they have an abominable custom, to cause or make them pass through the water, as sacrifices unto the said ungodly god.

"This idol is in shape like a serpent, with seven heads, and on cheeks of each head it hath the form of a wing upon each cheek; which wings open and shut, and flap, as it is carried in a stately chariot, and the idol in the midst of it; and one of the moguls sitting behind it in the chariot, upon a convenient place, with a canopy, to keep the Sun from injuring of it. When I (with horror) beheld these strange things, I called to mind the XIIIth Chapter of the Revelations, 1st verse, and likewise the 16th and 17th verses of the said Chapter, in which places there is a beast, and such idolatrous worship, mentioned; and those sayings in that text are herein truly accomplished in the 16th Ver., for the bramins are all marked in the forehead, and likewise all that come to worship the idol, are marked also in their foreheads; but those that buy and sell, are all marked in the left shoulder; and all such as dare or presume to buy and sell, not being marked, are most severely and grievously punished.

"They have built a great chariot, that goeth on sixteen wheels of a side, and every wheel is five feet in height, and the chariot itself is about thirty feet high. In this chariot on their great festival days at night, they place their wicked god Jaggarnat, and all the bramins, being in number nine thousand, then attend this great idol, besides of Ashmen and Fackeires some thousands, or more than a good many. The chariot is most richly adorned with most rich and costly ornaments; and the aforesaid wheels are placed very complete in a round circle so artificially, that every wheel doth its proper office without any impediment: for the chariot is aloft and in the centre betwixt the wheels; they have also more than two thousand lights with them: and this chariot, with the idol, is also drawn with the greatest and best men of the town; and they are so eager and greedy to draw it, that whosoever, by shouldering, crowding, shoving, heaving, thrusting, or any violent way, can but come to lay a hand upon the ropes, they think themselves blessed and happy. And when it is going along the city, there are many that will offer themselves as a sacrifice to this idol, and desperately lie down on the ground, that the chariot wheels may run over them,

whereby they are killed outright; some get broken arms, some broken legs, so that many of them are so destroyed, and by this means they think to merit heaven.

"There is also another Chariot, which hath but twelve wheels, and that is for an idol or a devil of an inferior rank, or lower degree, and he goes not abroad or in progress, but when the bramins please. This pagodo is situated by the Sea side, and is to be seen into the Sea, at the least, ten or twelve leagues; for the air and sky is clear and pure in those parts, that it may be seen far: it is enclosed with a wall of stone, much about twenty-two feet in height, and the enclosure is four square, and every square is hundred fifty geometrical paces; so the four squares in the total are six hundred paces or yards about: it standeth due east, west, north, and south; and every square hath a great gate for the entrance into it, but the south and west gates are barred up till the festival times, and none commonly used but the north and east gates, but especially the north gate; for it hath all its prospect into the high or Chief Street of this city."

Muhammadan Governors.

During the Mughal rule the system of administration changed from time to time.* At the outset, Bengal, Bihār and Orissa were all placed under one Governor, the first being Mān Singh, who was appointed in 1591 and continued to hold office till 1604, when Akbar's serious illness made him resign and hurry off to the imperial court. On the accession of Jahāngīr, he was sent back to Bengal as Governor, but was recalled in 1606, and was succeeded by the Emperor's foster brother, Kutb-ud-dīn Khān-i-Chisti, who was killed by Sher Afghān, the first husband of Nūr Jahān. After his death, Orissa was made a separate Governorship in 1607, the first Governor being Hāshim Beg, who was succeeded in 1610 by Rājā Kalyān of Jesalmir, whose niece had been married to Jahāngīr before he became Emperor. Kalyān lived till 1617, when he was, according to the chronicles of Jagannāth, killed by the Rājā of Khurdā. To avenge his death, his successor Mukarram Khān invaded Khurdā and formally annexed it to the empire in 1617; he appears to have been succeeded in 1620 by Hasan Alī Turkmān.

When Ibrāhīm Beg Khān Fath Jang, the brother of the Empress Nūr Jahān, became Governor of Bengal, Orissa seems to have been added to his territory; and he appointed his nephew Ahmad Beg Khān *Naib Sūbahdār* of Orissa. In 1624 the latter

* Compiled from the *Akbarnāmā*, *Tuzuki Jahāngīrī*, *Pādishānāmā*, *Maasir-ul-umrā* and other Muhammadan accounts, and from Blochmann's notes on the *Ain-i-Akbarī*.

invaded Karaha (Khurdā), whose ruler had got out of hand, when prince Khurram (afterwards Emperor Shāh Jahān) rebelled against his father and marched into Orissa from the Deccan. To this invasion Ahmad Beg offered little resistance, for he retreated first to Piplī and next to Cuttack, and finally went off to Burdwān. The prince thereupon marched to Bengal, after having appointed Muhammad Taki Simsaz *alias* Shāh Kulī Khān as Governor. On the subsequent retreat of the prince through Orissa, Rao Ratan successfully attacked Shāh Kulī, and sent him captive to the Emperor. In the last year of Jahāngīr's reign we find that Bākr Khān Nazamshāni was installed as Governor, and in 1631 conquered Mansurgarh and Khiraparā, a valley between Orissa and Tilang. Next year, on account of complaints about his oppression, his post was given to Mutakid Khān, who seems however to have held office for only a short time; for from Bruton's account Aghā Muhammad Zamān Teherāni appears to have been Governor in May 1633: it was this nobleman who granted the first *farmān* authorizing the English to trade in Orissa. In 1634 Mutakid Khān was again sent back to Orissa, where he stayed fairly long for a Muhammadan Governor, viz., till 1639, probably on the strength of his having presented the Emperor with 12 elephants in 1637 and again in 1638. Shāh Nawāz Khān Shafvi held the post from 1639 to 1641.

In the latter year Orissa was added to Bengal, which had already been placed in charge of prince Shāh Shujā. He deputed Aghā Muhammad Zamān to Orissa as Deputy Governor, but in 1644 Mutakid was reappointed, only to be recalled three years later; he is referred to as "Muttus Cawn" in English accounts, which record the fact that he granted another *farmān* to the English. A quick succession of Governors now followed, viz., Simsamuddaula (1654), Tarbiāt Khān Barlas (1655-57), and then Khwājā Bakherdād Ashraf Khān, who appears to have been the last *Sūbahdār* of Orissa in the reign of Shāh Jahān. All these Governors were subordinate to prince Shāh Shujā, who revised the rent-roll of Bengal and Orissa, which had been prepared under the supervision of Todar Mal 60 years before.

With the accession of Aurangzeb in 1658 and the decline of the Mughal empire, the Orissa Governors were changed very frequently, too frequently indeed for any good administration. The following is a list of them as far as they can be traced in the *Alamgīr-nāmā* and the Factory Records* and other

* Factory Records and O. C. Collections, quoted in *Countries round the Bay of Bengal*, 1669—79, ed. by Sir R. C. Temple, Hakluyt Society, Series II, vol. XII, pp. 152-3, Note 4.

documents:—Saiyid Sher Khān of Barhā (1658-59), Khān Dourān Saiyid Muhammad (1660-68), Kobād Khān Mīr Akhar (1668) according to *Maasir-ul-umrā*, Tarbiat Khān (1669), Safi Khān (1670), Ibrāhīm Khān (before 1673), Safi Khān (1673), Safsikan Khān (1673), Rashid Khān (1674), Sāle Khān (1677), Nurullā Khān (1678), Abu Nasr Khān (1682), Akram Khān (1697), Muhammad Razā (1710), and Khān Jahān Bahādur, otherwise called Izz-ud-daula Khān Alam* (1711).

Of these numerous Governors there is little of interest to record. Safi Khān is probably the same as "Ruffee Ckauns, Nabob of Orixa," who granted an order confirming the privileges of the English in Orissa in the 13th year of the reign of Aurungzeb.† Rashid Khān also granted a *farmān* to the English‡ and was described as follows in 1675:—"We have notice of not a worse Nabob come to Orissa than the present Ruzzard Chaan who robs the whole country in and about Cateck." Sāle Khān, son of Azzum Khān, called "Saly Cawn"§ by the English, also granted them a *farmān* to trade in Orissa. Abu Nasr Khān built the Jājpur mosque in 1682, and the temple of Jagannāth was broken by orders of Akram Khān.

Last days of Muhammadan rule.

Finally Orissa was added to the Deputy Nizāmship of Murshid Kulī Khān, who revised the rent-rolls of Bengal and Orissa for the second time and appointed his son-in-law, Shujā-ud-dīn Muhammad Khān, as Deputy Governor (*Naib Sūbahdār* or *Naib Nāzim*) of Orissa. He held office for nearly 14 years, and built the Kadam Rasul of Cuttack in the reign of Shāh Alam I (1707—1712). His successor was Muhammad Taki Khān, his illegitimate son, who interfered greatly with the worship of Jagannāth. Consequently, the Rājā of Khurdā carried away the idol across the Chilkā lake, and for greater safety placed it on the summit of a hill, "which circumstance," we are told, "injured the revenue of Orissa to the amount of 9 lakhs of rupees per annum, being the usual amount of the collections from the pilgrims."‖ On the death of Muhammad Taki Khān in 1734, the Nawāb entrusted

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* *Later Mughals*, W. R. Irvine, J.A.S.B., 1896, p. 174; *Early Annals*, Wilson, II, 14.

† *William Hedges' Diary*, ed. by Col. H. Yule, Hakluyt Society, vol. III, 191; Sir G. Birdwood's Report on the old Records of the India Office, p. 80.

‡ Factory Records and O. C. Collections, quoted in *Countries round the Bay of Bengal*, note to p. 153.

§ List of Farmans under August 1714, in the Diary and Consultation Book of the United Trade Council at Fort William in Bengal, quoted in C. R. Wilson's *Early Annals of the English in Bengal*, vol. II, 184, 189.

‖ Stewart's *History of Bengal.*

the government of Orissa to his own son-in-law, Murshid Kulī Khān. The Rājā of Khūrdā managed to conciliate his Dīwān, Mīr Habīb Alī Khān, and secured the favour of Murshid Kulī Khān by payment of *nazar;* and then feeling that the worship of Jagannāth could be carried on with safety, brought back the idol and re-established the worship at Purī.*

In 1740 Alī Vardi Khān became Nawāb of Bengal, and one of his first acts was to march south against Murshid Kulī Khān, who had refused to acknowledge his authority. A battle fought near Balasore in 1741 ended in the complete defeat of the Governor, who fled to Masulipatam, leaving behind his family, his wife and all his treasure. "But, Providence, which watched over that forlorn family, suscitated a saviour for it, and this was the Rājā or prince of Ratipur, who is also lord of Jagannāth, a famous place of resort and pilgrimage from all India, where the diversity of clans so remarkable amongst Gentoos, and the shyness from each other which it produces, ceases at once by an ancient law, to make place for a mutual intercourse deemed obligatory in a sacred place held in the highest veneration."† The Rājā sent an escort to Cuttack under the command of one of his officers, Murād Shāh, and the Governor's household and treasure were safely removed to "Inchapur." Ratipur or Rathipur, it may be explained, is a place in the Khurdā subdivision where the Rājā had a fort; Inchapur is Ichchāpuram, a small town in the Ganjām district. The "Lord of Jagannāth" is Rāmchandradeva II, who had turned Musalmān, according to the palm-leaf chronicles, and thus had a Musalmān employé.‡

Alī Vardi put his nephew Saiyid Muhammad Khān in charge of Orissa, and the *Sair-ul-Mutākharin* and *Riyāzu-s-Salātin* mention the names of several other Deputy Governors of Orissa during this troublous period, viz., Sheikh Muhammad Masum, his nephew Abdul Nabi Khān and his son Abdul Rasul Khān, Durlabh Rām, and Sheikh Abdul Sobhān. Of these Masum and Sobhān were killed in battle, Durlabh Rām was captured, and Abdul Nabi died and was buried in the Kadam Rasul at Cuttack, like Muhammad Taki Khān, a previous Deputy Governor.

MARATHA RULE.

In 1742 the Marāthās came down upon Bengal, and made Orissa a basis for their annual inroads until 1751, when Alī Vardi Khān, wearied by long years of fighting and borne down

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* *Riyazu-s-Salātin,* Eng. transl., Bibl. Ind. Edn., pp. 302-3.

† Raymond's translation of the *Sair-ul-Mutākharin,* vol. I, p. 354.

‡ *Later Kings of Khurdā,* M. M. Chakravarti, J.A.S.B., 1898, p. 383.

by age—he was nearly 75—bought them off, by practically ceding to them the Province of Orissa, and agreeing to pay twelve lakhs of rupees as *chauth* for Bengal. The treaty of 1751, nominally preserved the dignity of the Emperor, for a Musalmān, Mīr Habīb according to one account and Sadrul Haq according to another, was appointed to govern in his name; but the revenue was collected with the aid of Marāthā troopers, and was made over to the Marāthā prince. In a short time the pretence of dependence upon the Empire was given up. The Muhammadan deputy of the Emperor was assassinated, and his successor found himself unable to carry on the government. In 1755-56 the nominal deputy of the Mughal Emperor could not even wring the stipulated Marāthā tribute out of the Province, and begged to be released from his office. A few months later a Marāthā obtained the governorship, and from that date till 1803 Orissa remained a Marāthā Province.

The general nature of the Marāthā rule may be gathered from the remarks of Mr. Stirling:—"The administration of the Marāthās in this, as in every other part of their foreign conquests, was fatal to the welfare of the people and the prosperity of the country; and exhibits a picture of misrule, anarchy, weakness, rapacity, and violence combined, which makes one wonder how society can have kept together under so calamitous a tyranny." But a clearer insight into the actual condition of the country as it appeared to the people themselves may be gathered from the account given to the Collector of Purī in 1867 by an aged Hindu, who had been living in Orissa ever since the latter days of Marāthā rule. This old man had seen Raghujī Bhonslā, when he came to Purī in order to replenish his purse. He used to ride in at the head of his troops, about 1,500 fighting men, besides camp-followers, with a long train of elephants, horses, palanquins and carts, and then held *darbārs* at which he made the leading men of the town pay what he demanded. His idea of justice was to decide in favour of the side which gave him most money, and "a poor man would as soon have thought of drinking the ocean dry as of going to Raghujī to settle his disputes."

There were no courts or jails in the country; thieves and dacoits went everywhere. If an Oriyā caught a thief in his house at night, he used to brand him by burning and then let him loose; but sometimes the villagers would rise and kill the thief outright. The Governor's camp-followers lived by plunder, and men struggled for even this mean post, while to be one of his regular sepoys was to be a king. The Marāthās made no roads or embankments; the only roads, if they can be called such, were mere pathways

across the fields; and even the old pilgrim road to Jagannāth was a rough track, which in the rains was covered with water for miles together. To add to the difficulties and dangers of the journey, the Marāthās systematically stripped all rich pilgrims on the road, and poor pilgrims, if they escaped being plundered by the Marāthās, were attacked and sometimes killed by bands of dacoits who infested the jungle.

The old man's description of the drastic methods employed by the Marāthās in collecting the revenue is equally graphic. "An underling of the governor entered a village, called the people together, and ordered one man to give him so many *pans* or *kāhans* of cowries, and another so many. If the people did not at once pay, they were first beaten with sticks, and if that would not do, they were afterwards tortured. A favourite mode of torture was to thrust a brass nail between the finger-nails and the flesh, and another was the *chāpunī*. This consisted of throwing the man on the ground, placing two crossed bamboos over his chest, and gradually pressing on them till the man consented to pay what was demanded. If he still refused to pay, the operation was repeated on his stomach, back, legs, arms, etc. If the Marāthās saw a man was fat, they said that he had eaten plenty of *ghī*, and must be wealthy—so all people tried to keep lean. If they saw any one wearing clean clothes, they declared he could afford to pay—so all people went about in dirty clothes. If they saw a man with a door to his house, they said it was plain he had something—so people either did not keep doors, or hid them when the *amlā* were coming. Above all, if a man lived in a masonry (*pakkā*) house, he was sure to be fleeced. The Marāthās held that a man who could build a *pakkā* house could always afford to pay them Rs. 100. They also had another test to find out whether a man had money. They got together the leaves which serve as plates, and on which is served the family repast; and poured water over them; if this did not cover every part of the leaves, they declared that they were greasy, and that the family were all *ghī*-eaters, and must be possessed of money. They used to enter houses, even the women's apartments, dig up the floors, probe the walls, and sometimes pull them down altogether, in search of money."*

From Mr. Motte's account of his journey through Orissa in 1766 we learn that such exactions were not confined to the collectors of revenue. "The followers of the camp," he says, "are plunderers by profession. They are under a chief, who

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* Sir W. W. Hunter's Orissa.

accounts with the commanding officer. They carry each an iron rod, 10 feet long, with which they probe the ground wherever they suspect money or effects to be buried. They smell the rod, repeating cabalistical words, and pretend they make their discoveries by the nose; but this is mere affectation, for they know by the ease with which the rod enters whether the ground has been lately dug, however carefully the earth may have been thrown in again, or however artfully the surface may have been formed." At the same time, he says, oppression was not so flagrant in any place which was a *fauzdāri* or military station "to the support of which the rent of the surrounding country is appropriated. It is, in other words, an official fief, and the country becomes the property of the fouzdar for the time being. Now it is the custom of the Mahratta troops to plunder as much in the zamindaries tributary to them as in any enemy's country; the tenants of such zamindaries, therefore, desert their villages at the approach of an army, while the fouzdar, meeting the commander with a present, obtains an order to be exempted from pillage, the execution of which he attends to himself." The general result of Marāthā rule as witnessed by him in his journey from Calcutta to Cuttack is briefly but forcibly described. "In my journey it will be unnecessary to say that any place I came to was once considerable, since all the places which were not so are now depopulated by the Mahrattas, and such alone remain as on account of their bulk are longer in decaying."*

Marāthā Governors.

A list of Marāthā Governors, as far as they can be traced,† is given in the margin. Of these *Sūbahdārs* the most energetic was Sheobhat, who gradually changed a disputed and precarious authority into a fairly powerful government. In his time, the zamīndār of Kīmedi invaded Khurdā in 1761, and its Rājā having called in his aid, Sheobhat drove out the invaders, and then seized Purī and *parganas*

	A. D.
Sheobhat Sāntrā ...	1756
Chemna Sāhu and Udayapuri Gosāin ...	1764
Bhawānī Pandit ...	1764
Sambhujī Ganesa ...	1768
Bābājī Nāyak ...	1771
Madhojī Hari ...	1773
Bābājī Nāyak (2nd time) ...	1775
Madhojī Hari (2nd time) ...	1775
Rājārām Pandit ...	1778
Sadāsiva Rāo ...	1782
Inkājī Sukhdeo ...	Uncertain
Bālājī Konji ...	1803

* T. Motte, *Narrative of a Journey to the Diamond Mines at Sumbhulpoor*, Asiatic Annual Register, 1799.

† J. Beames, *Notes on the History of Orissa*, J.A.S.B., 1883; A. Stirling, *Account of Orissa*, reprinted, Calcutta, 1904; Palm-leaf chronicles of Jagannāth temple.

Lembai, Rāhāng, etc., as compensation for the expenses incurred. In the same year he completed a settlement of Orissa with the following rent-roll :—231 gold mohurs, 3,82,829-8-0 rupees and 27,82,446 *kāhāns* of cowries, *i.e.*, reckoning at the rate of four *kāhāns* per rupee, nearly 10½ lakhs of rupees. The oppression of his successor Bhawānī Pandit appears to have given him a posthumous popularity. "Sheobhat," it was said, "supported the national troops with the plunder of foreign countries; Bhawānī Pandit with the plunder of his own."* The latter was the Marāthā Governor with whom, as shown later, Lord Clive opened up negotiations for the cession of Orissa. His successor Sambhujī Ganesa revised the settlement of the Province, which resulted in a nominal increase of more than five lakhs. A further revision was carried out by Rājārām Pandit, who from the rank of an assistant rose to be the head of the Province. Setting aside the *chaudhris* and *kānungos*, he introduced the system of direct collections from tenants and village headmen, and imposed on the Rājā of Khurdā a tribute of Rs. 10,000. In 1781 Chemnajī, a nephew of the Bhonslā king, visited Cuttack and sent Rājārām to Calcutta to demand *chauth*. According to Stirling, he is said to have negotiated a treaty with Warren Hastings, by which the British Government agreed to pay 27 lakhs on condition of all further claims being abandoned, while the author of the *Sair-ul-Mutākharin* says that the Marāthā prince was given three lakhs of rupees, with a number of rich presents, to induce him to permit an English force to pass through Orissa and reinforce General Coote at Madras. It is at least certain, as mentioned later, that Rājārām Pandit concluded a treaty by which the Marāthās and British promised mutual aid. Of later Governors we know little. Another revision of settlement took place in the time of Inkājī Sukhdeo ; and we may gather that Bālājī Konji was the last of the Marāthā Governors from a mention of a grand ball being given in his hall on Christmas 1803 after the British conquest.†

Negotiations with Marāthās.

During the rule of the Marāthās the British appear to have entered into negotiations for the cession of Orissa on more than one occasion. As early as 1766 Lord Clive instructed an envoy, Mr. Motte, to sound the officers of Jānojī, the Rājā of Nāgpur, on the question of his ceding Orissa for an annual tribute. He was received at Cuttack "with more politeness than state" by

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* T. Motte, *Narrative of a Journey to the Diamond Mines at Sumbhulpoor*, Asiatic Annual Register, 1799.

† *Calcutta Gazette*, 12th January 1804, *Selections*, III, p. 326.

the Governor, Bhawānī Pandit, who "explained the just demand Jannoojei, his master, had on the Company for the arrears of tribute of Bengal and Bahar." Motte thereupon replied that he "understood the revenues of Orissa were made over to Jannoojei in lieu of the tribute of the three Provinces and that the best mode which could be adopted as to restore it to the Company, who should pay a stipulated sum and send a resident to the Court of Nagpoor as a hostage. . . . Bowanee Pundit was too good a statesman not to comprehend the use which might be made of an alliance with the English. He caught the idea with the vivacity of a Mahratta, told me the interests of our court were the same, that he would write what he had said to Jannoojei, and desired me to write to Lord Clive." The negotiations were however abortive, for shortly afterwards, Jānojī being attacked by the Peshwā and his capital Nāgpur captured, Bhāwanī Pandit wrote to say that "his master must give up all thoughts of an alliance with the British at present."* Subsequently Warren Hastings made an unsuccessful attempt to rent a tract of country from the coast from Madhojī, who ruled over the Marāthās as regent for Raghujī, the nephew and adopted son of Jānojī, who had succeeded in 1772.

In 1779 Madhojī sent a force to invade Bengal in pursuance of a confederacy between the Marāthās, the Nizām, and Haidar Alī for the overthrow of the British power. Madhojī was, however, at heart friendly to the British, and being disgusted at the refusal of the Peshwā to admit his claims to Mandlā undertook the expedition with much reluctance. The British Government, who had despatched a force to the Carnatic by the coast route, under Colonel Pearse, to co-operate with the Madras army against Haidar Alī, found little difficulty therefore in concluding a treaty in 1781, by which the army of Madhojī was bought off from an invasion. A force of 2,000 Marāthā horse was to be sent from Cuttack with Colonel Pearse to assist in the war against Haidar Alī, and the British, for their part, engaged to pay a lakh a month for the maintenance of this force, and to send troops to assist in an expedition against Garh Mandlā, and obtained a promise that they were to be represented by an agent at the Nāgpur Court.†

BRITISH CONQUEST. The British conquest of Orissa, which took place 22 years later, formed part of the great campaign against the Marāthās in

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* T. Motte, *Narrative of a Journey to the Diamond Mines at Sumbhulpoor*, Asiatic Annual Register, 1799.

† Aitchison's Treaties, Engagements and Sunnuds.

Central India undertaken by the Marquis of Wellesley. The force destined for the expedition assembled at Ganjām, and started from that place on the 8th September 1803 under the command of Colonel Harcourt. It marched along the narrow strip of coast between the sea and the Chilkā lake, and Mānikpātnā was reached on the 15th, having been abandoned by the enemy without resistance. It took two days to cross the dangerous channel through which the Chilkā communicates with the sea; and had the enemy made a determined stand there, our position would have been one of considerable danger and difficulty. Leaving Narsinghpatnā on the 18th, our forces entered Purī without opposition. After a halt of two days in the holy city, Colonel Harcourt told off a detachment of Hindu sepoys for the protection of the temple and resumed his march.

The Marāthās, who had gathered in a camp on the other side of the river which flows past the city, at first opened a sharp fire upon our troops, but soon broke and fled. We crossed the river, driving them out of the wood in which they had entrenched themselves. The real difficulties of the expedition now began. There were no roads; the cart tracks, which did duty as roads, were rendered almost impassable by water and mud; and it was with the greatest difficulty that the guns and supplies could be dragged along. The enemy, though not daring to come to close quarters, threw out skirmishers and impeded the progress of our troops by every means which their superior knowledge of the country put in their power. A night attack on the Marāthā camp was made on the 2nd October; the enemy were found leisurely eating their dinner, and driven out. The Marāthās then took up a position before Mukundpur near Piplī. On the 4th October they attacked our advanced guard in vastly superior numbers, but were repulsed with considerable loss. They made good their retreat into the jungles of Khurdā; and no further opposition was offered to the march of our troops, who reached the banks of the Kātjurī a few days after the action at Mukundpur. The crossing of the river was effected safely; and on the 8th October Colonel Harcourt entered Cuttack city unopposed, and six days afterwards captured the fort. Equal success attended the expedition against Balasore, which had been despatched from Bengal, and the British conquest was complete.

The only two noteworthy events in the subsequent history of Purī are the rebellion of the Rājā of Khurdā in 1804, and the rising of the *paiks* or peasant militia in 1817-18.

RAJAS OF KHURDA.

In order to understand the situation which the British now had to face, it will be necessary to revert briefly to the history

of the Rājās of Khurdā, who had long been semi-independent chiefs.*

On the death of Mukundadeva, the last independent Hindu king of Orissa, the country was thrown into great disorder. During the confusion Ramāi Rautrā, who, according to one version, was a son of Danai Bidyādhara, a minister of the Bhoi dynasty, came from the south, seized the western part of the Purī district, and fixed his capital at Khurdā. His reign began in 1568-69,† and at the Mughal conquest Todar Mal is said to have recognized his claim to be the paramount chief of Orissa. He brought the sacred relics of Jagannāth from Kujang fort in Cuttack, and consecrated them in the temple with much pomp and solemnity. Subsequently, in 1590, the Afghāns ceded Purī and its temple to Mān Singh, but two years later, they plundered the city. Mān Singh having defeated them in a decisive battle at Jaleswar pursued them to the fort at Sārangarh, 5 miles south-west of Cuttack town, which was then in possession of Rāmchandradeva, besieged it and compelled them and their ally to sue for peace. The Afghān chiefs were transferred from Orissa to *pargana* Khalifābād with new *jāgīrs*; and after hearing a counter-claim advanced by the sons of Mukundadeva, Mān Singh confirmed Rāmchandra in possession of Khurdā on payment of tribute.‡ Mukundadeva's sons were compensated by the grant of *kilā* Aul to one, and *kilā* Patiyā to the other; and all three were made grandees of Akbar's court.§

For some time Mān Singh appears to have kept the Jagannāth temple in his own hands, but eventually he placed the shrine in the charge of the Khurdā Rājā, who maintained the worship with great splendour and founded several colonies of Brāhmans in villages bearing his name. Henceforward the history of the Khurdā Rājās is closely connected with that of the temple. About 1598-99, Mukunda Rai of Cossimcotta in the Vizagapatam district was defeated by the general of Muhammad Kulī Kutb Shāh of Golconda and took shelter in the territory of Rāmchandra. The latter, though aided by Madhu Singh, a brother of Mān Singh, could not prevent the Musalmān general ravaging his country, and Mukunda Rai had perforce to retire to Bengal.‖

* This account of the dynasty has been compiled from the palm-leaf chronicles checked and supplemented by the information in Muhammadan and other histories.

† J.A.S.B., 1883, p. 33.

‡ *Akbarnāmā*, *Ain-i-Akbari*, Blochmann, I, 607, Note 4; Stewart's *History of Bengal*; F. C. Danvers, *The Portuguese in India*, vol. ii, p. 17.

§ *Ain-i-Akbari*, I, 489, 508, 526.

‖ Brigg's *Feristah*, III, 465—6, 531.

After a long reign of 31 or 32 years this king died and was succeeded in 1599-1600 by his son Purushottamadeva, whose reign was a troubled one. His territory was first invaded by Mirza Khurram *alias* Kamal Khān, and the idols had to be removed from the Jagannāth temple to Kapileswarpur. In 1609-10 at the time of the Car Festival one Keso-māre (Kesūdās Māru) burnt the cars, killed many of the people, and then prevented all worship for nearly eight months, until the Rājā managed to satisfy his demands. Next, in 1613-14, Rājā Kalyān invaded the country, and the gods had to be removed to fort Gurbai on the Chilkā lake and there kept on a boat for safety. The following year the Khurdā chief met and killed Kalyān in battle, and overran the land up to Cuttack; but two years later Mukarram Khān stormed the Khurdā fort and annexed the *kilā*. The Rājā fled to Māntiri on the frontier of the Ranpur State, while the idols were removed from Gurbai fort to the frontiers of Bānpur, but were taken back to the temple two years later on the retreat of Mukarram Khān. After this the Rājā did not long enjoy peace, for in 1620-21 Ahmad Beg marched through the *kilā* as far Bānpur and Mahima in Garh Andhāri. The Rājā died in the following year and was succeeded by his son Narasinhadeva.

The troubles with the Musalmān Governors still continued. In 1624-25 the Rājā, on being ordered by Ahmad Beg to send to Cuttack some of his relatives, probably as hostages, removed his camp and idols to Māntiri in Ranpur, and then attacked Ahmad Beg, who however escaped. Next year prince Khurram (afterwards Emperor Shāh Jahān) marched from the south with a large retinue. The Rājā met him and accompanied him to Jājpur, returning with a rich present (*khilat*). Subsequently, on the news that Shāh Jahān has retreated from Patna, the Rājā, in fear of an invasion, removed the images of Jagannāth to Khurdā, and only replaced them after Shāh Jahān was well away from the Province. In 1626-27 we find that he paid a visit to the Konārak temple, had a measurement made of it, and removed the sun-image to the temple of Indra inside the Jagannāth enclosure. In 1646 he was killed at Purī by Fateh Khān, an officer of the Nawāb, who looted both the palace and the temple. He was succeeded by Gangādharadeva, who after ruling for less than 4 months, was killed by Balabhadradeva, who held Khurdā till 1654-55 and was succeeded by Mukundadeva I. Except for a terrible famine in 1669-70 the long reign of this chief is barren in interest. On his death in 1692-93 his son Divyasinhadeva succeeded. In the fifth year of his reign the Nawāb Ekrām Khān had the images of Jagannāth seized and the temple broken

and closed; the chronicles add that he secured only the wooden proxies, the real images being kept hidden behind the Bimalā temple. Two years later there was a disastrous cyclone, and in the following year (1700-01) another famine occurred.

Of the next two Rājās, Harikrishnadeva (1719-20 to 1724-25) and Gopīnāthdeva (1724-25 to 1731-32), there is nothing of interest to record. In the time of the tenth Rājā, Rāmchandradeva, we find that on account of Muhammadan interference with the temple worship, the images were removed from the Jagannāth temple to a hill on the Chilkā lake, until Mīr Habīb, the Assistant of the Orissa Nawāb, induced the Rājā to bring them back to Purī. The Nawāb soon afterwards attacked the Rājā and took him captive to Cuttack, where he turned Musalmān and married the daughter of the Nawāb. It was this Rājā who, as stated above, rescued the family of the Nawāb Murshid Kulī Khān, after he had been defeated by Alī Vardi Khān in 1741 near Balasore, and sent them under an escort to Ichchāpuram in Ganjām. A few months later the Rājā's Commander-in-Chief, Murād Khān, with a large contingent of troops, assisted Mirza Bakr Khān, son-in-law of Murshid Kulī, who had usurped the governorship, in a battle with Alī Vardi's advance guard.

On the death of Rāmchandradeva, Mīr Habīb at first set up Padmalābhdeva of Patiyā, but eventually recognized his grandson Vīrakishoradeva (1742-43 to 1779-80). Soon after his succession, the Marāthās burst down on Orissa and captured Alī Vardi Khān's Deputy, Durlabh Rām, and finally had the Province ceded to them. Khurdā being invaded in 1760 by Nārāyan Deo, a chieftain of Kīmedi, Vīrakishora sought the assistance of the Marāthā Governor Sheobhat Sāntrā. The latter drove out the invaders, but the Rājā could not pay the expenses of the campaign and had to mortgage to the Governor the best portions of his *kilā*, *parganas* Lembai, Rāhāng, Purī town, etc. Towards the end of his rule, the Rājā became mad, murdered four of his own children and committed other excesses. On his death in 1779-80, his grandson Divyasinhadeva II was acknowledged Rājā by the Marāthās on his agreeing to pay an annual tribute of Rs. 10,000. The Rājā now removed his quarters from Khurdā fort to a fort built in the pass of the Bārunai hill and took possession of Bānpur, Khurdā and Lembai. He was succeeded in 1797-98 by Mukundadeva II, with whom the chieftainship of Khurdā ended, his territory being annexed by the British in 1804 in consequence of his rebellion. The following account of this rebellion, and of the subsequent rebellion of 1817-18, is quoted with some abbreviation

from Mr. G. Toynbee's *Sketch of the History of Orissa from 1803 to 1828.*

The Rājā of Khurdā, although stripped of a considerable slice of his original territory, had been left by the Marāthās in comparative independence within his own *kilā*. This, indeed, was more a matter of necessity than of choice. Although the Marāthā cavalry easily overran the open *parganas* of Rāhāng, Sirai and Chaubiskud, they could not penetrate into the jungle fastnesses of Khurdā proper ; nor did their infantry care to encounter in their own ground the *paiks* or local militia, who were little, if at all, inferior to them in the open. The lowland country, however, was exposed to frequent devastation, and the unfortunate inhabitants, fearful of espousing either side, suffered equally from the ravages and depredations of both. When we entered the Province in 1803, the Rājā passively espoused our cause, and tendered his allegiance to the British Government, doubtless in the hope that these *parganas*, wrung from him by the Marāthās, would be restored. The Commissioners in charge of the civil administration decided, however, to retain them, as they had been taken by us from the Marāthās, who were in actual possession of them at the time of our conquest. Though this decision was at the time silently acquiesced in by the Rājā, it was a source of bitter disappointment to him. When the European troops had returned to Madras after the conquest, and the native force which remained at Cuttack had been considerably reduced in numbers by the necessity of establishing detached outposts in different parts of the country, he thought that a favourable opportunity had arrived for recovering the lost territory.

Rebellion of 1804.

In September 1804, the Rājā was detected in an intrigue relative to the affairs of the Purī temple, and was therefore forbidden to issue orders to any person whatever residing within the limits of the Mughalbandi territory, without the express sanction of the Commissioners. In October, exactly one month after the issue of this order, the Rājā's troops—if a disorderly mob of *paiks* and peons can so be called—made a raid on the villages in the vicinity of Piplī, and carried off all the cattle and other moveable property on which they could lay hands. This affair, though partaking more of the nature of a large dacoity or gang-robbery than of an organized and preconcerted military aggression, nevertheless occasioned considerable alarm. This was not, perhaps, under the circumstances, unnatural. The majority of our forces had returned to Madras, and what few troops remained behind were scattered over a considerable area. The nature of the country rendered speedy communication and rapid concentration

impossible. There was, moreover, a lurking suspicion that the Marāthās might be in secret league with the Rājā to harass, if not to overthrow, the British authority. The Commissioners, therefore, determined to be on the safe side, and to prevent, by prompt and decisive steps, these raids from growing into anything more serious.

Troops were sent from Ganjām, and a detachment marched from Cuttack. The rebels being quickly driven out of Piplī, retreated to the fort at Khurdā, followed by our troops. This fort, the ruins of which still remain, was situated at the foot of a hill at the east end of the valley of Khurdā. The approaches from the south lay through a difficult pass between the Bārunai hills, and were stockaded and fortified with strong masonry barriers. It was three weeks before we were in a position to carry these works by storm. When this was at length achieved, the Rājā made good his escape southwards with a handful of his followers, the British troops being too exhausted to pursue them; but he surrendered a few days afterwards. His territory was confiscated and placed in charge of Major Fletcher, who erected the first civil buildings at Khurdā; and the estate has since been managed as a Government *Khās Mahāl*, the Rājā receiving an allowance of Rs. 2,133-5-4 per mensem as *nānkār* or *mālikānā*. Makundadeva was sent a prisoner to fort Bārabāti at Cuttack, from which he was shortly removed to Midnapore. He was released in 1807, allowed to live in the palace in Bālisāhi in Purī town, and vested with the superintendentship of the Jagannāth temple; but in 1817 he was again made prisoner in consequence of another rebellion.

***Paik* rebellion.**

This was the rebellion of the *paiks*, a kind of local militia to whom the English conquest had brought little but ruin and oppression. Rude and contemptible as this new foe undoubtedly was in comparison with our native troops, the nature of the country and their intimate knowledge of it gave them an advantage which rendered the contest more equal than it would otherwise have been. They are described as follows by Stirling in his *Account of Orissa*:—"The *paiks*, or landed militia of the Rājwārā, combine with the most profound barbarism and the blindest devotion to the will of their chiefs, a ferocity and unquietness of disposition which have ever rendered them an important and formidable class of the population of the Province. They are paid by service lands, which they cultivate with their own hands in time of peace, subject to the performance of certain military and police duties whenever called on by their chiefs.

"The *paiks* of Orissa are divided into three ranks, distinguished by names taken from their occupation, or the weapons which

they chiefly use, viz :—(1) The *pahāris*, who carry a large shield made of wood, covered with hide and strengthened by knobs and circles of iron, and the long straight national sword of Orissa, called the *khandā*. They are stationed chiefly as guards. (2) The *banuās*, who now principally use the matchlock (in lieu of their old missile weapons), but have besides a small shield and sword. It was their duty to take the field principally and go on distant expeditions. (3) The *dhenkiyās*, who are armed with bows and arrows and a sword, and perform all sorts of duties. The war dress of the *paiks* consists, or did consist, of a cap and vest made of the skin of the tiger or leopard, a sort of chain armour for the body and thighs, and a girdle formed of the tail of some wild animal. Besides the terror inspired by these unusual habiliments, they further heightened the ferocity of their appearance by staining their limbs with yellow clay and their countenances with vermilion, thus exhibiting altogether as savage and fantastic an air as one can well conceive to invest the national army of any country or people. However wild and motley their appearance and composition, they certainly did not fight badly, at least when encouraged by the proximity of their jungles, since we find them sustaining the most bloody battles with the Mughals; and it may be doubted whether they were not superior to any infantry which the Berār Marāthās ever brought into the field during their government of the Province."

A body of local landed militia of this kind might have been a tower of strength to the British Government, had liberal and conciliatory measures been adopted from the first; but by a fatal and short-sighted policy, Major Fletcher had been allowed to resume their service lands shortly after the confiscation of the Khurdā estate. Nor was this all. Deprived of the lands which they had enjoyed from time immemorial, they were subjected to the grossest extortion and oppression at the hands of the farmers, *sarbarāhkārs*, and other underlings to whom our Government entrusted the collection of the revenue, and also to the tyrannies of a corrupt and venal police. A leader was all that was required to fan the lurking embers of rebellion into open flame.

The opportunity produced the man in the person of Jagabandhu Bidyādhar Mahāpātra Bhawānbīr Rai, an officer who had inherited from his ancestors the post of *bakhshī* or commander of the forces of the Rājā of Khurdā, being second only to the Rājā himself in rank. Besides *jāgīrs* and other perquisites, the family of Jagabandhu had held for several generations the valuable estate of *kilā* Rorang at a low quit-rent. This estate was in Jagabandhu's possession at the time of the British

conquest; and he was one of the first to proffer submission to Colonel Harcourt in 1803. The settlement of *kilā* Rorang was accordingly made with him, but eventually he was dispossessed by a Bengali adventurer, and in June 1814 the Government passed orders that no settlement should be made with him, until he should have established a title to the property in the regular course of law. Jagabandhu was reduced to beggary, and for nearly two years derived his maintenance from the voluntary contributions made by the people of Khurdā for his support. He was constantly attended by a ragged tribe of followers, bearing the insignia of state pertaining to his former condition. When advised to institute a suit for the recovery of his estate, he evinced the greatest repugnance to do so, pleading his want of means, the degradation of suing as pauper, and the uselessness of any reference to the Courts from an Oriyā when a rich Bengali was the defendant.

This was the position of Jagabandhu in March 1817 when a body of Khonds, 400 strong, from the State of Gumsur, crossed over into the Khurdā territory and openly unfurled the banner of revolt.* The *paiks* rose as one man and joined them under their former leader, Jagabandhu. They proceeded to attack the police station and other Government buildings at Bānpur, where they killed upwards of 100 men and carried off some Rs. 15,000 of treasure. The rebels then marched on Khurdā itself, increasing in numbers as they proceeded. Their success at Bānpur had set the whole country in arms against us; and, seeing the hopelessness of resistance, the whole of the Government officers stationed in Khurdā sought safety in flight. All the civil buildings were burnt to the ground by the rebels, and the treasury sacked. Another body of the rebels advanced into *pargana* Lembai, and murdered one of our native officials, who had rendered himself obnoxious. On the intelligence of these events reaching Cuttack, the authorities at once despatched such a force as they thought would be sufficient to quell the disturbance and restore order. One detachment marched direct to Khurdā, and another proceeded to Piplī to protect *pargana* Lembai.

The Magistrate, thinking that his presence would help to restore order, set out on the 1st April, accompanied by a detachment of 60 sepoys, with the intention of joining the force which had proceeded to Khurdā. On the evening of the following day he arrived at Gangparā, a village only about two miles distant from Khurdā. A barricade had been erected here, which was defended

* For a contemporary account, *see* *Calcutta Gazette*, April 10, 1817, *Selections*, vol. V, pp. 189-190.

by a considerable body of rebels. The British troops were fired upon; and, as it was growing dark, it was resolved to halt for the night and attempt to force the stockade early the next morning. A letter was sent off to the officer who had proceeded to Khurdā, begging him to march out with his force from Khurdā, so as to place the enemy between two fires. Early next morning the messenger returned with the intelligence that the village of Khurdā had been totally destroyed, and that the troops were nowhere in the neighbourhood. There was nothing for it under the circumstances but to beat a speedy retreat. No provisions had been brought from Cuttack, and none were to be procured on the spot. The sepoys were worn out with hunger and fatigue, and the number of the rebels gradually swelled to about 3,000 men. As soon as the retreat was commenced, the enemy opened a brisk fire. The English troops kept as much as possible to the open; the *paiks*, on the other hand, kept well under cover of the jungle, from which they suddenly emerged now and again to fire on us, or to secure whatever of our baggage had been dropped or abandoned in the confusion.

The situation was a critical one, but no loss of life was sustained; and after marching without a halt from 5-30 A.M. until 3-30 P.M., the troops safely reached Bālkātī on the Purī road, and there halted. While preparing to resume their march at 9-30 P.M., they were again attacked under cover of the darkness by a large body of insurgents; but a well-directed volley soon scattered the rebels, and our troops continued their retreat without further molestation. They reached Cuttack on the 4th April, without tents, elephants, and every article of heavy baggage which they had taken with them. The Magistrate wrote to Government as follows:—"This instant returned, after a most fatiguing march of a day and night, from Khurdā; I can only write for the information of His Lordship in Council that my retreat was forced, and that the whole of the Khurdā territory is in a complete state of insurrection. The insurgents call upon the Rājā of Khurdā, and Jagabandhu issues orders in his name Their avowed intention is to proceed to Purī and reconduct him in triumph to his territory."

The detachments of sepoys which had proceeded to Khurdā and Piplī were not more fortunate than the Magistrate's party. The officer in command of the Piplī detachment, in attempting to force the rebel position at Gangparā and effect a junction with the Khurdā force, was killed at the head of his men. Both detachments were compelled to retreat, with the loss of all the baggage, to Cuttack, *viâ* Piplī. The latter place fell into the hands of

the *paiks*, who sacked it and burnt the thāna. On the other hand, an officer who had been despatched with a force for the protection of Purī, reached that town on the 2nd April and found all quiet there. His progress had not been molested in any way, and he wrote to recommend that a force should be detached for the special duty of falling upon the rebels and bringing on a decisive action with them. Accordingly on the 9th April, an officer with 550 men and a few guns, marched on Khurdā; and on the 12th April martial law was proclaimed in the Khurdā territory.

On the morning of the same day a large body of the insurgents assembled at Sukal, a small village near Purī. In the evening they entered the town by the Loknāth Ghāt, and burnt the Government court-house and several other public and private buildings. The houses of the European residents were situated then as now on the seashore about half a mile from the native town. In these the native officers of Government took refuge. The troops were located in the bungalow of the Salt Agent. On the morning of the 13th April, the rebels emerged from the jungle which skirted the town on the east and opened a desultory fire on our position. The sepoys returned it, and the contest was continued for about two hours, but at length the sepoys charged the enemy and drove them back into the town.

The success was, however, only temporary. The insurgents returned in greater numbers, having been reinforced by others of their own party and joined by many of the rebels belonging to the temple and to the Rājā's private establishment. Some of the inhabitants of the town also joined the rebels, and the priests of the temple openly proclaimed the fall of the English rule and the restoration of the authority of the ancient line of sacred kings. Being thus hemmed in on three sides by the insurgents and the sea, it was deemed advisable to beat a speedy retreat to Cuttack by the only road still left open. Provisions were beginning to run short, and it was found impossible to procure a fresh supply. It was important, too, to prevent the Government treasure from falling into the hands of the rebels. Purī was therefore abandoned; and the fugitives, among whom were the Salt Agent and the Collector of the pilgrim tax, reached Cuttack on the 18th April.

All communication between Cuttack and the southern portion of the Province was now completely cut off; consequently, nothing had been heard of the force despatched to Khurdā on the 9th April, and the greatest apprehensions were entertained for its safety. The detachment, however, reached Khurdā without encountering any opposition; and the officer in command, on learning that the insurgents had gone in great force in the direction of Purī,

proceeded against them by forced marches. On the second day after leaving Khurdā he came upon the rebels, about 1,000 strong, drawn up behind a line of embankments. The insurgents, who had never before encountered any large body of disciplined troops, fled in the wildest dismay and confusion as soon as fire was opened. The force resumed its march on Purī, entered the town, and captured the Rājā, just as he was on the point of taking flight.

Several other encounters took place between our troops and the insurgent *paiks*, and the rising spread to Cuttack, where it was stamped out without much difficulty. British authority soon re-established itself everywhere, although the country did not at once recover its accustomed tranquillity and security. Bands of *paiks*, most of them proclaimed offenders and fugitives, continued to infest the jungles of Khurdā for some time after the pacification of the rest of the country. They committed, chiefly by night, the direst excesses which the police were powerless to punish or prevent. It was necessary, therefore, in the early part of the year 1818, again to have recourse to military force, and the bands of marauders were at length hunted down. The Commissioners appointed to investigate the causes of this outbreak reported that we ourselves were to a large extent to blame, and that the peasantry had many and real grievances to complain of. The resumption of a large tract of service land, our currency regulations, which compelled the people to pay their land tax in silver instead of in cowries as heretofore, the heavy salt duty, the extortions and chicanery of our underling Bengali officials, were all bitter grounds of discontent. At the present day, the Khurdā estate is a profitable and well managed Government property, and the cultivators are a contented and generally prosperous class.

It remains to note that Rājā Mukundadeva died a captive in November 1817, and that the line is still in existence. His son Rāmchandradeva (1817—56) built a new palace on the car road at Purī and amassed much wealth by his thrifty habits. He was succeeded by Vīrakishoradeva II (1856—62), and the next Rājā was Dibyasinhadeva II (1862—77), who was transported for his life on a charge of murder. The present representative of the family and Superintendent of the Jagannāth temple is Rājā Mukundadeva, popularly called the Rājā of Purī, who is given by Hindus the lofty title of Deva-rājā or Chalanti Vishnu, *i.e.*, the moving god.

To the archæologist, Purī is one of the most interesting districts in Bengal. On the western border have been found dolmens and other traces of prehistoric peoples. The Dhauli ARCHÆOLOGY.

hill contains the oldest carving of an elephant known in India, and edicts of Asoka inscribed in the latter half of the third century B.C., which, with one exception, are the oldest Indian historical inscriptions. Nine miles to the north lie the caves of Khandagiri and Udayagiri, the earliest Jaina caves and Jaina remains as yet authenticated, which modern research has shewn, were excavated between the third and first century B.C. Midway lies the holy city of Bhubaneswar, which is crowded with numerous Saiva temples and contains fine gems of artistic architecture, like the shrines of Parasurāmeswar, Sisireswar, Kapālinī, Mukteswar, Rājārānī, and magnificent structures, such as the temples of Lingarāj, Bāsudeva, Brahmeswar and Megheswar. These temples range over several centuries, and were apparently constructed from the eighth to the twelfth century A.D. Parasurāmeswar is the oldest; Megheswar and Bāsudeva are the latest; and the great temple of Lingarāj may be ascribed to the middle of the epoch, being built about the tenth century A.D.

The *tīrtha* described in early works, such as the Mahābhārata, as being on the sea shore *en route* to Kalinga may or may not be the old site of Purushottam Kshetra; but it is, at any rate, clear from inscriptions that the present temple of Jagannāth was built under the orders of king Chodaganga, probably in the first half of the 12th century. The temple of Mārkandeswar may be somewhat earlier, but the present Gundichā *Mandapa* was built at a considerably later date. Of the tanks in the town of Purī, Indradyumna, Mārkanda and Swetgangā seem to be the oldest, while the Narendra tank was built later in the 14th century. The imposing temple of the sun-god at Konārak, justly described as the most exquisite memorial of sun-worship in India, is another monument of the Ganga dynasty, having been built under the orders of Narasinhadeva I in the third quarter of the 13th century.

There are numerous other temples in the district of archæological interest, such as the temple of Gopīnāth at Satyabādī, of Nīlkantheswar in Kotdesh, and of Durgā at Bānpur. The western part of the district is studded with the remains of old forts, the oldest of which is the fort at Sisupāl close to Bhubaneswar, which is probably anterior to the rule of the Ganga kings, while the remains at Khurdā date back to the last days of the Khurdā kings. A more detailed account of the archæological remains will be found in Chapter XVI.

Architecture. Architecturally, the temples of this district are of great interest as showing the gradual evolution of a peculiar style of Hindu architecture. This style is called Orissan, from its exclusive

prevalence in Orissa,* but imitations of it spread as far south as Mukhalingam in the Ganjām district of the Madras Presidency, as far north as Barākar in the Burdwān district of Bengal, and as far west as Rājam in the Raipur district of the Central Provinces. Purī district, however, contains the most numerous and also the best examples of this style.

An examination of the architectural details of the different temples reveals at least three sub-types. The first may be called the Parasurāmeswar sub-type, after its best and oldest example at Bhubaneswar. These temples are neither large nor high, the largest, the Parasurāmeswar temple, being only 21 feet square outside and less than 60 feet high; while their carvings are well executed and kept subordinate to the general plan. Gradually, the temples became larger, higher, and more elaborate, size, massiveness and elaborate details being regarded as more important than fine execution, symmetry of proportion, and the severe beauty of a simple well-conceived plan. The vast majority of Orissan temples are of this class. They are more or less repetitions of one another, but signs of at least two sub-groups may be traced, viz., the Brahmeswar and the Lingarāj.

The Parasurāmeswar group is represented by the shrines of Parasurāmeswar, Sisireswar and Kapālinī (miscalled Baitāla Deula) at Bhubaneswar which seem to have been built between the eighth and the tenth century A.D. Chronologically, the Brahmeswar and Lingarāj types overlap, but in the long run the Lingarāj type prevailed in Orissa to the exclusion of the former. The best specimens of the Lingarāj type were constructed between the 10th and 13th century A.D., and include such magnificent temples as Lingarāj (with Bhagavatī's shrine), Bāsudeva, Yameswar and Megheswar at Bhubaneswar, the temples of Jagannāth and Mārkandeswar in Purī town, and the sun-temple at Konārak. The Brahmeswar type falls between the 10th and 12th century A.D. and includes several fine temples at Bhubaneswer, such as Brahmeswar, Rājārānī, Kedāreswar and Chitrakarni.

The most flourishing period of the architectural art of Orissa appears to have been between the eighth and the thirteenth centuries A.D., beginning with the temple of Parasurāmeswar, reaching its meridian in the great temple of Lingarāj, and closing in the massive structure of Konārak. The grandeur of

* R. L. Mitra's *Antiquities of Orissa*, vol. I, p. 24; Fergusson's *History of Indian and Eastern Architecture*, Book VI, Ch. II, p. 414 *et seq.*; Prof. Fletcher's *History of Architecture*, p. 618.

the general plan, the elaboration of minute details, the gigantic size of the stones and iron beams used, the minute and often exquisitely cut carvings in the large number of temples still surviving all combine to justify the description of the Orissan style of architecture as "one of the most complete and interesting styles of Indian architecture."*

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* Fergusson's *History of Indian and Eastern Architecture*, p. 435.

CHAPTER III.

THE PEOPLE.

THE first census of the district was taken in the year 1872, and the result was to show for the district, as now constituted, a population of 769,779 persons. During the next 10 years the population increased by no less than 15·4 per cent., being returned in 1881 at 888,592 souls, but it is probable that a large part of the increase was due to greater accuracy of enumeration. However this may be, the growth of population appears to have been sustained; for, notwithstanding repeated outbreaks of cholera and small-pox during the ensuing 10 years, the number of inhabitants in 1891 was returned at 944,998, representing an increase of 6·4 per cent. The advance was equally marked in the succeeding decade in spite of adverse influences. In 1891 the crops suffered from insufficient rain at the commencement of the monsoon, and the damage was aggravated by a cyclone in the following November, which brought on an exceptionally heavy flood. Most of the embankments were breached, the standing crops were destroyed, and cholera, dysentery and other diseases spread over the district. The year 1897 was equally disastrous. The crops of 1896 were short everywhere, and this resulted in general scarcity, though relief operations were necessary only in the neighbourhood of the Chilkā lake and in parts of the Khurdā subdivision. The country round the Chilkā was again subject to scarcity in 1900, when the rainfall was scanty and ill-distributed. Conditions were, therefore, far from satisfactory during the decade, but the opening of the railway benefited the people; and the the census of 1901 showed that the population had risen to 1,017,284, *i.e.*, by 7·6 per cent. GROWTH OF POPULATION.

The following summary of the results of the census of 1901 is quoted from the Bengal Census Report by Mr. E. A. Gait:—"The actual increase brought out by the census is 72,286, or 7·6 per cent., but part of this is due to the fact that a great religious festival was in progress at Purī at the time when the census was taken, and the immigrant population thus exceeded that of 1891 by more than 13,000. The number of persons born in the adjoining districts who were enumerated in Purī was less than in Census of 1901.

1891, and the addition to the population due to pilgrims must therefore have been greater than the above figures would indicate. The number of female emigrants has fallen off, while that of males is about the same as it was ten years previously. But for these movements of the people the rate of growth would probably have been about the same as, or rather less than, that of the previous decade. The Sadar and Piplī thānas show the smallest rate of progress. This is due mainly to the fact that the embankment on the left bank of the Bhārgavī river has been breached so often that it was decided in 1895 to leave it unrepaired, and the consequences, says the Magistrate, have been fatal to the prosperity of the country which this embankment had been designed to protect, and which was previously one of the richest and most populous parts of the district. The opening of the railway, moreover, has stimulated emigration in search of employment. Many of the poorer Brāhmans who live in these thānas have taken to the profession of pilgrim-conductors, and large numbers were absent at the time of the census. Gop thāna shows a greater increase than the rest of the headquarters subdivision, and it is less developed, and there is more room for expansion. The Khurdā subdivision is more favourably situated than other parts of the district, and its somewhat more rapid development is therefore only natural."

The salient statistics of the census of 1901 are reproduced below:—

Sub-division.	Area in square miles.	Number of		Population.	Population per square mile.	Percentage of variation in population between 1891 and 1901.
		Towns.	Villages.			
Purī	1,528	1	1,889	658,048	431	+ 7·2
Khurdā	971	...	1,212	359,236	370	+ 8·4
District total	2,499	1	3,101	1,017,284	407	+ 7·6

General characteristics. **Density of population.** The average density of population, which is only 407 persons per square mile, is lower than it would otherwise be owing to the inclusion of the area of the Chilkā lake. Density of population in different parts is very largely determined by the physical aspects of the three distinct areas into which the district is divided. In the maritime tract the pressure of the population, which falls in the Purī thāna to 254 persons to the square mile, is greatly reduced by a belt of saline soil, running along the sea and covered by sand, coarse grass or scrub-wood, in which agriculture is almost unknown. In the submontane strip, a rocky region supporting a scanty, semi-Hinduized population, the density is somewhat

higher than in the salt tract, but is still comparatively low, falling to 287 persons to the square mile in the Bānpur thāna. The alluvial plain lying between these two is highly cultivated and is the most thickly inhabited part of the district, the density of population being as great as 753 persons to the square mile in the Piplī thāna, which is watered by the Bhārgavī river.

Taking each thāna separately, it will be found that the figures showing the density of population are misleading, if physical conditions are ignored. Thus, the Purī thāna includes the Chilkā and Sar lakes, besides the sandy tract bordering on the sea and a large area flooded every rainy season by the Bhārgavī river; the really habitable portion of the thāna is as thickly populated as other parts of the district. Piplī shows the greatest density, owing to this area being free from hills, lakes and unculturable wastes. The density of Gop is reduced by the sandy wastes and jungles along the sea littoral; and that of Khurdā and Bānpur by hills and forests, especially in the Māls, a wild tract adjoining Nayāgarh and Gumsur.

Migration. Apart from the crowds of pilgrims who flock to Purī, and who are only temporary visitors, migration into or out of the district is not very active, except across its frontier into contiguous areas. On the whole, the volume of emigration is greater than that of immigration. A certain number of the residents of Purī are attracted to and settle in the sparsely inhabited Native States along the western boundary of the district, where much arable land is still unoccupied. Others go to Calcutta and its neighbourhood to serve as *pālki*-bearers, *darwāns* and labourers; and natives of the district are found working as cooks and domestic servants in different parts of Bengal. This overflow is, however, mostly temporary or periodic. The men generally go for a short time in the slack season when agricultural operations are at a standstill, and return with their savings at the breaking of the monsoon in order to cultivate their ancestral holdings. The advent of the railway has naturally afforded far greater facilities for communication with the outside world than previously existed, and has stimulated migration. The number seeking employment elsewhere has increased, and, at the same time, natives of the district employed in Bengal return home at much more frequent intervals than formerly.

Towns and villages. The only town in the district is Purī, the population of which in 1901 was 49,334. The number of inhabitants of Purī is, however, always an uncertain quantity and varies extremely as pilgrims to the temple of Jagannāth happen to be numerous or few at the time of the census. Thus, the increase in the population

from 28,794 in 1891 to 49,334 in 1901 was due mainly to the presence of an unusually large crowd of pilgrims on account of the Govinda Dwādasī festival. These pilgrims were counted separately, and were found to number 17,085; and if these be deducted, the population of the town falls to 32,259 or only 12 per cent. more than in 1891.

The remainder of the people are clustered together in 3,101 villages, most of which are of small size, 52 per cent. of the rural population being resident in villages with a population of under 500, and 42 per cent. in villages with 500 to 2,000 inhabitants. The people have hitherto developed no tendency to collect into cities and no new centres of industry have sprung up. The Oriyā appears, in fact, to have an inherent aversion to town life; he will not voluntarily leave his hereditary fields; and even when forced to betake himself to a town, he strives to reproduce his village life in his new surroundings.

GENERAL CONDITION OF THE PEOPLE.

The following account of the general condition of the people is quoted from Mr. H. McPherson's Settlement Report (1900). In ordinary years the condition of the people is fairly prosperous. The opening up of communications has raised prices more than it has raised rents, and consequently the agricultural classes are better off than before. In years, however, of calamity, such as flood or drought, the ordinary ryot suffers much, as nothing is laid by for future contingencies, and there is always much waste of money in social and religious ceremonies. The majority of the cultivators are continually in debt. They always run to borrow from the local *mahājan* when in need, and the rate of interest is 25 per cent. The debt is never paid in full. The average cultivators find it just possible to make two ends meet. After setting aside a quantity of his grain for seed, paying his rent, and settling his account with his *mahājans*, he has not more than enough to feed his family. The majority of the ryots are simple contented people. They seek the aid of the courts only when they fail to get justice from the *mukaddams* and the village *panchāyats*. An admirable trait in their character is that they are not addicted to liquor, only a few among the lower classes using toddy. Tobacco or *gundi* (a preparation of tobacco) is used with *pān* or betel leaf, and also smoked in the form of cigars, locally called *pikā*. Small cultivators supplement their ordinary means of livelihood by engaging as labourers.

Food.

The cost of ordinary living is not much, as the food consumed is of the coarsest and cheapest kind; it consists of rice prepared by the cultivator's own labour from the paddy reserved for home consumption, of oil, spices and salt. Fish caught in neighbouring

streams or swamps is occasionally added to the fare; of the fish caught in the rains part is preserved for future use. The meal is ordinarily cooked in the evening and served hot; the unconsumed boiled rice is mixed with water and left over for the next day's meal. This is locally called *pakhāla*, and is eaten with greater relish when spiced with salt and mixed with vegetables produced from the kitchen garden. Meals are served hot during the day time only to old men and children of well-to-do families.

Dress. The dress of an ordinary cultivator is a *dhotī* and a *gāmchhā*. For ordinary wear the males have two *dhotīs* of local manufacture costing about Re. 1-4, and two *gāmchhās* costing about 8 annas, and for occasional use at festival time, one *dhotī* of English manufacture, costing about 12 annas, and a *chādar*, costing about 8 annas; they have besides one sheet for winter use. Well-to-do people are now using shirts and coats, and in winter cotton or woollen shawls; some of them have taken to wearing country-made shoes; cloth umbrellas are very largely coming into use in place of those made of palm leaves. For women two *sāris* at Re. 1-8 each and two *khanduās* at 10 annas each are required. Gold and silver ornaments are used to a limited extent. Women of the *mahājan* class, and of the Brāhman and Karan castes use these ornaments more or less as circumstances permit. Women of the cultivating class generally wear brass and *kansā* ornaments.

Houses. The houses are built of mud and timber. Each house is generally divided into two compartments; one of those is called the *dāndaghara*, where the bullocks are kept, and the other is set apart for the zanāna. Alongside the house there is a verandah, on which visitors are received. The dwelling-house of an ordinary cultivator costs very little. Bamboo groves are found in almost all *bāri* lands. The string used is made of coconut fibre. The thatching straw and labour are their own. The houses of the village *padhāns* and *mukaddams* are usually the best in the village. Brass and *kansā* utensils are much used. We now find in the house of almost every cultivator a brass vessel (*garā*) for carrying water, a brass or *kansā* jug (*dhāla*), a brass or *kansā* plate (*thāli*), and a few brass and *kansā* cups (*ginā*).

Marriage. There is nothing peculiar to note about marriage customs, except that child marriage prevails among the Brāhmans only, who are liable to excommunication if a daughter attains puberty before marriage. The consummation of marriage before a girl reaches the age of puberty is, however, strictly forbidden. Among other castes, marriages generally take place after the girls are of age. Widow marriage is permitted except among Brāhmans, Karans, Baniyās and some respectable Khandaits.

The common practice is for the young widow to marry her husband's younger brother; and when she cannot get him, she marries out of the family. *Ghajia* is the name of a peculiar marriage custom obtaining in Kotdesh. According to this custom, a man obtains his wife by working for her. When a man is too poor to pay his marriage expenses, they are met by the parents of the girl, on condition that the man will remain and work for them in the fields till the amount has been made up.

Religious festivals.

The most important festivals observed by the people are the Doljātrā, Chandanjātrā, Rathjātrā, and Rāsjātrā, in which all join. During these festivals the idols are brought in procession with music; and dancing village boys (known as *gotipo*) and young men are regularly taught and rehearsed in some central place, large mango topes near the river side being generally selected. The meeting of the idols is called *melana*. In these *jātrās* primitive and rustic theatrical entertainments are also given.

Every village has its Bhāgabataghara, *i.e.*, a place where sacred books are deposited and read at night, and also its Grām Thākurānī. For the maintenance of the former the villagers contribute. If any stranger puts up in the Bhāgabataghara, he receives hospitality from the villagers, even if he is not known to any one of them. The Grām Thākurānī, who is supposed to be continually moving about the village, generally resides under a large fig or *pipal* tree. She is believed to cure sickness among children, and to be specially active during outbreaks of cholera and small-pox, when special offerings are made to her.

Summary.

"The above," Mr. McPherson writes, "is a description of the condition of the ordinary cultivating ryot in one of the more prosperous *parganas* of the district. In great part, it is applicable to the agricultural community of the whole district. In protected *parganas*, like Kotrāhāng, Paschimaduai, and in the greater part of Rāhāng, Lembai, Antarodh and Bānchās, where the ryot is comparatively free from the dangers of flood and drought, his normal condition, if not prosperous, is at least marked by sufficiency and content, and not by pinching poverty. This is not the case, however, in *parganas* exposed to heavy flood like Chaubiskud and Sirai, where plenty and starvation alternate. A bumper crop is reaped once every three or four years, but the lean years that follow a good harvest more than swallow up the ryot's savings. His savings are at the best of times but slender, for where the crop is uncertain, there is deep indebtedness to the zamīndārs and *mahājans* and a high rate of interest. The part clearance of his debts leaves the ryot little balance from the

bumper harvest to store against the day of need. The evils of the ryot's lot are still further aggravated in tracts which, like Pūrbaduai, Oldhār and Sirai, are subject to disastrous flood year after year without interruption. There continuous scarcity is the order of the day and special disaster spells famine.

"The smaller cultivators, even in ordinary years, have to eke out the profits of cultivation by service as day labourers in other parts of the district or by temporary migration to Cuttack and Purī. The stock of grain for home consumption is usually exhausted long before the new harvest is on the ground, and it is a common thing to see men, women and children collecting roots and leaves from the nearest scrub-jungle or the green scum of *sāgs* from the surface of tanks. So much is necessary to keep body and soul together. My spectacles may be coloured by what I saw in the famine year, but to me it certainly does appear true that to a cultivating ryot of the Purī district protection from flood is a question of life and death, and beside it differences of soil and differences of assessment are the merest trifles."

To the above account it may be added that the condition of the tenants in the Khurdā estate is said to be better than in any other part of Orissa. This is ascribed to the following causes:—the fertility of the soil; the facilities for grazing cattle; the supply of fuel and building materials at a nominal cost; the low assessment of the land; the fixity of the demand; the absence of illegal and uncertain taxation; the fixity of tenure; the right of free transfer; the grant of remissions of rent in bad years; the improvements made by Government with respect to water-supply and communications; the admirable administration of the estate. "All these causes," writes the Settlement Officer, "combine to render the condition of the Khurdā tenants far better than can possibly be expected to exist elsewhere."

CHARACTER OF THE PEOPLE.

The Oriyā has long had an unenviable reputation as a weak, effeminate and stupid creature. Early writers generally condemn the Oriyās. It is said that they "prefer dirt and scarcity of food with idleness to cleanliness and plenty with hard labour;" and that "industry and enterprise are as foreign to them as opium eating and noon-day sleep to the English husbandmen." This unfavourable estimation of their character was forcibly expressed by Stirling nearly a century ago:—"The Oorias as a nation are justly described by Abul Fazl to be very effeminate, that is they are extremely deficient in manly spirit, their figures are slight and delicate, and the costume of the males has little to distinguish it from that of the females, except the different manner of wearing the cloth fastened about the

loins. They are moreover equally ignorant and stupid. Orissa might be termed the Bœotia of India, with reference to the intellectual dullness of its inhabitants, as compared with the people of any other province. A striking proof of the estimation in which their capacity has been ever held is the fact that, in all ages and under all Governments since the downfall of the Orissan monarchy, the principal official employments throughout the province have been engrossed by foreigners—by Bengalis north and Telingas south of the Chilka lake—owing, I really believe, in a great measure to the difficulty of selecting from its indigenous population, persons properly qualified for trusts of difficulty and importance. The mass of the people are little prone to the commission of crimes of a daring and heinous character, as might be inferred from the feminine spirit above ascribed to them; but they are well versed in all the arts of low cunning, dissimulation and subterfuge, and the love of intrigue forms a prominent feature in their character, however clumsy many of their attempts to mislead or circumvent. In justice, however, to the bulk of the agricultural population, it must be said that the ryots are extremely industrious, though they work with little spirit or intelligence, and altogether the Oorias of the plains, whatever their faults, are certainly the most mild, quiet, inoffensive, and easily managed people in the Company's provinces. They furnish too a valuable class of servants in whom the virtues of fidelity and honesty (according to their own conception of those qualities) are conspicuous."

Experience has proved that the character of the people given by Stirling was written in ignorance of the Oriyā character; he was too honest to misrepresent, too just to be prejudiced against them, but coming in contact only with those who, under excited passions, were engaged in law-suits, he did not know the people. It is true that they are ignorant, superstitious and priest-ridden, and have less natural acuteness than the Bengalis. But they are not so prone to litigiousness or so ready to impose, and they evince more gratitude for kindness. They have proved themselves to possess aptitude for public business and honesty in offices of responsibility; while Oriyā bearers are faithful and trustworthy, when properly treated, and will follow a kind master to all parts of India. It is true that the labouring classes and the lower castes of cultivators are somewhat dull-witted, but it is doubtful if the Bihāri peasant is mentally the superior of the Oriyā. Among the educated classes the Brāhmans are somewhat bigoted, but the Sāsani Brāhmans are of a refined and intellectual type; and the writer caste of Karans, or as they are called locally

the Mahāntis, have as high a reputation for acuteness as the Kāyasths of Bihār. The old reproach of unfitness for Government employment can no longer be levelled against them. The purely foreign element has almost disappeared from among the ministerial establishment; and even the domiciled Bengali who has adopted the country as his own is said to be losing ground before the progressing native of Orissa.

Generally speaking, the people are kindly and good humoured, easily controlled and remarkably law-abiding; they are given only to committing petty crimes, and in many ways recall the old idea of the mild Hindu. Outside Orissa they have a reputation for good work as domestic servants, carpenters, chaprāsis and coolies; and their readiness to migrate and find employment in different kinds of labour requiring physical rather than mental capacity is noticeable. Even the literate classes, however, still show a want of enterprise, a slowness, and a conservatism which are in marked contrast to the versatility of their Bengali cousins; and an inborn love of ease and dislike of hard work appears to permeate all classes.

In justice, however, to the Oriyās it should be remembered that they have long been a conquered nation, and that from the middle of the 16th century they were continually oppressed, first by the Afghāns, then by the Mughals, and lastly by the Marāthās, "whose administration," writes Stirling, "was fatal to the welfare of the people and the prosperity of the country, and exhibits a picture of misrule, anarchy, weakness, rapacity and violence combined, which makes one wonder how society can have kept together under so calamitous a tyranny." It would have been strange, if the Oriyā character had not been affected by such tyranny, which discouraged thrift, promoted improvidence, and tended to make the people feeble and timid.

There has also been another influence at work which helps to account for their want of spirit and enterprise. From time immemorial they have been a priest-ridden race, kept in subjection by the Brāhmans and Gurus, and subject to all the influences of religious superstition and caste prejudice. Until half a century ago, the Brāhmans and Karans held the monopoly of education and kept it strictly in their own hands. The efforts of Government to diffuse education met with great opposition. The schools were looked upon as infidel inventions; and even as late as 1860, a learned Oriyā, on being appointed to the orthodox post of Sanskrit teacher in the Purī school, was excluded for a year or two from the Brahmanical orders, and stormy discussions took place as to whether he should not be formally expelled from his

caste. Not only had the Brāhman and Karan the monopoly of education, but no one outside the priestly caste might plant even a coconut tree. These profitable trees were only planted by non-Brahmanical hands after the advent of the missionaries, and the native Christian who had been the first to break the immemorial custom was regarded for many years as a man lying under the wrath of the gods.*

A third important factor in the development of the national character has been the liability of Orissa to physical calamities. This has been largely instrumental in promoting thriftlessness and idleness. The ruin of crops and houses by cyclones, the loss of life and destruction of property caused by storm-waves, the drought following short rainfall and the floods which are due to its excess, all these are calamities, the very prospect of which induces improvidence, while their occurrence results in indebtedness and poverty. In these circumstances, it is perhaps not surprising that the ryot, whom the inclemency of the seasons may deprive of half his produce in any year, should exhibit an oriental fatalism and show little desire for progress.

LANGUAGE. Oriyā is the mother tongue of the great majority of the people, but a few other languages are also in use. Muhammadans speak a kind of ungrammatical Urdū among themselves; some of the *mahants* from Bihār and immigrants from Northern India talk Hindī; Bengalis talk their own language, at least among themselves, and so do the Telugu boatmen and fishermen from the Madras Presidency.

Oriyā. With these exceptions, the language of the district is Oriyā,† or as it is sometimes called Odrī or Utkalī, *i.e.*, the language of Odra or Utkal, both of which are ancient names for the country now called Orissa. Oriyā, with Bengali, Bihāri and Assamese, forms one of the four speeches which together make up the eastern group of the Indo-Aryan languages. Its grammatical construction closely resembles that of Bengali, but it has one great advantage over Bengali in the fact that, as a rule, it is pronounced as it is spelt. There are few of those slurred consonants and broken vowels which make Bengali so difficult to the foreigner. Each letter in each word is clearly sounded, and it has been well described as "comprehensive and poetical, with a pleasant sounding and musical intonation, and by no means difficult to acquire and master." The Oriyā verbal system is at once simple and complete. It has a long array of tenses, but the whole is so logically arranged, and

* *Orissa*, by Sir W. W. Hunter, vol. ii, pp. 139–141.

† This account of the Oriyā language has been condensed from Dr. Grierson's Linguistic Survey of India, vol. v.

built on so regular a model, that its principles are easily impressed upon the memory. It is particularly noticeable for the very complete set of verbal nouns, present, past, and future. When an Oriyā wishes to express the idea embodied in what in Latin would be called the infinitive, he simply takes the appropriate verbal noun, and declines it in the case which the meaning requires. As every infinitive must be some oblique case of a verbal noun, it follows that Oriyā grammar does not know the so-called infinitive mood at all. In this respect Oriyā is in an older stage of grammatical development than even classical Sanskrit, and, among Indo-Aryan languages, can only be compared with the ancient Sanskrit spoken in the Vedic times.

The archaic character, both of form and vocabulary, runs through the whole language, and is no doubt accounted for by geographical position. Orissa has ever been an isolated country bounded on the east by the ocean, and on the west by the hilly tracts inhabited by wild aboriginal tribes. On the south the language is Dravidian and belongs to an altogether different family, while, on the north, it has seldom had political ties with Bengal. On the other hand, the Oriyās have been a conquered nation. For eight centuries Orissa was subject to the kings of Telinganā, and, in modern times, it was for fifty years under the sway of the Bhonslās of Nāgpur, both of whom left deep impressions of their rule upon the country. On the language they imposed a number of Telugu and of Marāthī words and idioms, which still survive. These are, so far as we know, the only foreign elements which have intruded themselves into Oriyā, except the small vocabulary of English court terms and a few other English expressions, which English domination and education have brought into vogue.

Oriyā is remarkably free from dialectic variation. The well-known saying, which is true all over the north of India, that the language changes every 10 *kos*, does not hold in Orissa. In Orissa proper, *i.e.*, in what is known as the Mughalbandi, which consists of Cuttack, Purī and the southern half of Balasore, the language is one and the same. "Three localities," writes Dr. Grierson, "each claim to be the place where Oriyā is spoken in its greatest purity, *viz.*, Cuttack, Khurdā in Purī, and Gumsur in the north of Ganjām. Probably Khurdā has the greatest claim to being considered the well of Oriyā undefiled."

Written character.

Oriyā is encumbered with the drawback of an excessively awkward and cumbrous written character. This character is, in its basis, the same as Devanāgari, but is written by the local scribes with a stylus on a talipot palm-leaf. These scratches are, in

themselves, legible, but in order to make them more plain, ink is rubbed over the surface of leaf and fills up the furrows which form the letters. The palm-leaf is excessively fragile, and any scratch in the direction of the grain tends to make it split. As a line of writing on the long, narrow leaf is necessarily in the direction of the grain, this peculiarity prohibits the use of the straight top line, or *mātrā*, which is a distinguishing characteristic of the Devanāgari character. For this the Orissa scribe is compelled to substitute a series of curves, which almost surround each letter. It requires remarkably good eyes to read an Oriyā printed book, for the exigencies of the printing press compel the type to be small, and the greater part of each letter is this curve, which is the same in nearly all, while the real soul of the character, by which one is distinguished from another, is hidden in the centre, and is so minute, that it is often difficult to see. At first glance, an Oriyā book seems to be all curves, and it takes a second look to notice that there is something inside each.

Literature. Oriyā literature* is of comparatively recent growth, none of the existing works, so far as can be ascertained, going back beyond the 16th century A.D. It consists exclusively of verse, and as is natural with a conservative people like the Oriyās, the earliest works extant are religious, viz., a few songs and certain paraphrases of the Sanskrit Purānas and epics. No work is so much venerated as the *Bhāgabata* of Jagannātha Dāsa; and next in estimation come the *Rāmāyana* of Balarāma Dāsa, the *Bhārata* of Sarolā Dāsa and the *Harivansa* of Achyutānanda Dāsa. All these were composed in the first half of the 16th century A.D., to which period may probably be referred popular songs like the *Kesabakoili* or cuckoo-song about Krishna. Profane literature appeared later, and at first dealt only with mythological stories. Among the oldest of these is the poem *Rasa-kallola* by Dīnakrishna Dāsa. This poem describes the early career of Krishna, and is a favourite with the Oriyās; its versification is peculiar in making every line begin with the same letter *ka*.

The most famous of the Oriyā poets is Upendra Bhanja, who flourished in the beginning of the 18th century. One of the royal family of Gumsur, a petty hill State in the north-west of Ganjām, he was driven to take refuge in Orissa in the course of a civil war, and there devoted his life to Oriyā literature. Of his voluminous compositions, forty-two are at present known, the bulk of them consisting of poems with love stories as their theme. He was apparently the first Oriyā poet to free himself from the trammels

* I am indebted to Bābu Monmohan Chakravarti, M.A., B.L., M.R.A.S., Assistant Superintendent, Gazetteer Revision, Bengal, for this account of Oriyā literature.

of exclusively religious and mythological influences. His poems labour under the defects of obscenity and unintelligibility, but have a fluent and graceful versification, and display a mastery over Sanskrit vocabulary and the rules of composition. His only rival in the latter respect is Abhimanyu Sāmantasinghār (who died in 1806), the author of the *Bidagdha-Chintāmani*, which explains in lucid lines the abstruse doctrines of Vaishnavite *Bhakti* and *Prema*. During the British period Oriyā poetry has shown no progress. It is represented by a few doggerel compositions and some small pieces of verse, among which a collection of short poems by Rai Rādhā Nāth Rai Bahādur, late Inspector of Schools, Orissa, deserves notice. Prose is, however, being carefully studied and has a promising future.

DIFFERENT RACES.

The bulk of the population of the district consists of Oriyā castes, but many little colonies from other parts of India have settled in the district. Among the official and landed classes there is a fair sprinkling of Bengalis, who long monopolized almost all the offices of trust in the administration and purchased many valuable estates. Some of the richest Bengali landholders are absentees, living in Calcutta, and seldom or never visiting their estates, but many among the official classes and smaller proprietors have gradually settled down in the district, and consider themselves naturalized in it. A small number of Telugus have come from the south, and established themselves along the coast and on the shores of the Chilkā. Among these may be mentioned the Kumutis from the adjoining district of Ganjām, who mostly reside in Purī town, and live by wholesale and retail trade, and the Nuliyās from the same district, who have practically the monopoly of deep-sea fishing.

A few immigrants from Bihār and the United Provinces have also settled in the district; while the trading classes contain families who have come from Bhojpur, Bundelkhand, and other parts of North-Western India. The Mārwāris have also effected settlements; they are the leading cloth merchants, and buy up the surplus crops of the year for exportation. A very few Marāthās survive from the time when the country was in the hands of their race. They live chiefly by trade, or enjoy little grants of land.

Aboriginal races.

A large proportion of the population still consists of aboriginal races or semi-Hinduized castes, such as Bauris, who number 84,188, Sahars (18,095), Pāns (7,064), Savars (3,260) and Khonds (2,560). They support themselves by the sale of wood and other jungle produce, or by working as labourers for Oriyā

landlords. In the latter case their services are remunerated by wages paid in kind or by permission to cultivate a portion of the farm on a kind of *metayer* system, provided that they perform all the heavy field work on their master's holding. Every village in Khurdā where these aborigines dwell has its Bauri or Savar quarter. They are the Gibeonites of Orissa, of whom Sir John Edgar, formerly Chief Secretary to the Bengal Government, has given the following account:—

"During my stay in Orissa, I was startled to find these people described as Pariahs, this term being clearly used as the equivalent of Pahāria or hillman. I had never before heard such a use of the word Pariah, and it is undoubtedly irreconcilable both with the received etymology and supposed history of the word. Still, in its application to the aborigines of Orissa, it indicates accurately their origin and position. They are evidently the descendants of the forest races by whom the uplands of Orissa were inhabited before the Aryan conquest. Their ancestors, hemmed in on all sides by the advancing immigrants, either took refuge in the then inaccessible hills of the interior, or remained as landless serfs in the tracts once held by them, helping their conquerors to work in the fields, or being employed by them in weaving and other handicrafts or in menial work. Even these serfs, however, so long as the forests remained uncleared, were not deprived by their conquerors of the use of them. They were able to catch game, to collect the various edible roots and fruits, which form so important a part of a hillman's food, to cut timber for their own use or for sale, to collect materials for basket work, and to make use of the forest in a thousand other ways. Besides this, the aboriginal people were in the habit of utilizing the uplands not suited to the plough cultivation of the Hindus for their hoe cultivation, which is locally known as *toilā*, mainly carried on upon newly cleared portions of scrub-jungle and yielding abundant crops of early rice, oil-seeds and cotton.

"Of late years, however, the enormous extension of cultivation which has followed on the security of our rule has constantly lessened the area of forest and waste land, which in former days had been looked upon as only fit for *toilā* cultivation, but has now been brought under the plough. Again, economic changes, like the substitution of foreign-made cotton goods for the produce of the native looms, have tended to deprive the aborigines of some of their occupations. At the same time, it must be said that their wretched condition is aggravated by the hostility, or at least want of sympathy, of the Hindu population of Orissa,

which contributes much to keep the Pariahs in their present state of degradation. A striking illustration of this is afforded by their exclusion from the great temple of Purī. Hindu tradition declares that Jagannāth was originally a god of the aboriginal Savars, and that he was transferred to the Hindus by the stratagem of a Brāhman. Anyhow, he is emphatically the god of the poor, and the distinctive feature of his worship is the levelling of all differences of rank and caste in his temple. But he is the god of the Hindu poor only, and no aboriginal caste is allowed to enter his temple, not even the Savars, whose god he is acknowledged to have been originally."

RELIGIONS. **Christians.** According to the census of 1901 Hindus number 998,918 or 98·2 per cent. of the population, and Muhammadans 17,285 or 1·7 per cent., while there are 1,078 Christians. Of the latter 913 are natives, including 809 converts of the Baptist Mission, which has stations at Purī, Piplī, Khurdā, Minchinpatnā, Banamālipur, Beleparā and Bānpur.

The Baptist Mission was established at Purī, more than 80 years ago owing largely to the efforts of Dr. Claudius Buchanan, Vice-Provost of the College of Fort William, who visited the town in 1806, and there witnessed the great Car Festival. A zealous Christian, he strongly advocated the establishment of some Christian institution near the temple, and the result was that in 1822 Cuttack became a centre of missionary labour with an out-station at Purī. The first Baptist missionary at Purī was the Revd. William Bampton, who arrived from England in 1822, died after 9 years service in Orissa, and was buried in the small cemetery at Purī. The first Oriyā convert was a Brāhman, who was baptized in 1828.

Muhammadans. The Muhammadans, once a dominant race in Orissa, are now an insignificant minority, said to be generally poor, proud and discontented. They include a few descendants of Afghān families from Northern India, but, as a rule, they are descendants of the common soldiery, camp-followers, and low caste Hindu converts. The latter, however, are not numerous, for the Muhammadan religion has never made any progress among the native population. The Muhammadan conquest was not only late chronologically, but failed to attain the same permanence and completeness as it did in Bengal. There was no effective colonization, and Islām could make few converts in this stronghold of Hinduism.

Hindus. The elasticity of Hinduism is very clearly marked in Purī. At one end of the scale is the Oriyā Brāhman, with his scrupulous observances about ceremonial purity; at the other are

semi-Hinduized aboriginals, who still cling, in part at least, to the Animistic cult of their forefathers. As the stream of Aryan invasion passed over Orissa, it swept these aboriginal tribes into the hills, where they remained isolated and untouched by Aryan influences. In course of time, some of them migrated into the plains, and, by a process of assimilation, became gradually Hinduized, hanging loosely on the skirts of the main body of the Hindus and retaining several of their primitive customs.

The process has been well described by Mr. N. K. Bose, C.S., formerly Collector of Purī, in an article on *The Hindus of Purī and Their Religion*, published in the Calcutta Review, July 1891. "The Khonds of the hills are a purely aboriginal race with a religion and polity of their own; but those who have migrated into the plains, have gradually adopted a settled life, copying Hindu rites and becoming fused in the general Hindu community. Mr. W. Taylor, who was Subdivisional Magistrate of the Khurdā subdivision for more than 15 years, and who knew the people well, thus describes them:—'The Khonds, or Santias, are aboriginal tribes, but those inhabiting the Bānpur Māls have no connection with the Khonds and Santias of Gumsur and Baud. They are, in fact, completely Hinduized. They venerate the cow and observe all Hindu festivals, and look upon themselves as Hindus of good caste. . . . The orthodox Hindus of Khurdā look upon the semi-civilized Khonds as of fairly good caste and will put up in their villages, or lodge in the house of a Khond, although they would consider themselves polluted by doing such things in the villages of Savars, Bauris and other aboriginal races of Khurdā.'

"Hinduism in Orissa holds out to all an ascending scale of ceremonial purity. The backward aboriginal tribes outside the pale of Hinduism, like the Khonds, set up a Hindu god, get a Hindu priest to minister to them, adopt some of the customs of the pure Hindus, and thus become, in time, recognized as low class Hindus. The more energetic, again, of low castes within the pale of Hinduism like the Chasā Od, gradually raise themselves to higher standards of ceremonial purity, and the more wealthy members among them even raise themselves to membership of some higher castes. Not only does Hinduism in Orissa, even at the present time, absorb the less civilized tribes outside its pale, but there is also a process of evolution in active operation among the recognized Hindu castes themselves."

The above account of the gradual absorption into Hinduism of such primitive aboriginal races as the Khonds has recently been

confirmed by Mr. J. H. Taylor in his report on the Khurdā settlement (1899). "Mr. W. C. Taylor," he writes, "pointed out that the aboriginal races were wild and barbarous more by reputation than in fact. I can confirm this from my personal experience. Only persons with an intimate knowledge of the Oriyā races and dialects can distinguish the Khond from the ordinary Oriyā *chasā* by his speech. I also found that they had lost all knowledge of their own Khond language, and could not understand simple questions in that tongue, such as "What is your name?" "Where is your home?". The majority are in appearance like respectable Oriyā tenants, only the very poor appearing in scanty rags, and their religion and customs differ little from those of the dwellers of the plains.

Vaishnavism. Vaishnavism is predominant among the people, and the causes of this predominance are not far to seek. The existence of the temple of Jagannāth, who is regarded as the incarnation of Vishnu, has exerted a powerful influence on the popular faith; and besides this, the famous reformer Chaitanya passed an important part of his life in these parts, and made a lasting impression upon the popular mind by the purity of his life and teachings. Vaishnavism is still struggling to divert the popular mind from the number of animistic accretions by which the religion of the lowest classes is encumbered; and it is Vaishnavism which mainly distinguishes the semi-Hinduized aborigines in the plains from their animistic brethren in the hills, though its adoption is often merely nominal and its high ethical principles do not shape the moral conduct of the people. A fuller account of Vaishnavism will be found in the next chapter.

Some aspects of Hinduism. The religion of the lowest classes still exhibits very clearly the blending of Hinduism with Animism, a process of assimilation which is illustrated by the legend of Jagannāth.* Here we find the aboriginal people worshipping a blue stone in the depths of the jungle, until the deity grows tired of the jungle offerings of the primitive people and longs for the cooked food of the more civilized Aryan race. When the Aryan element at length comes on the scene, the rude blue stone disappears and gives place to a carved image. At the present time the twofold worship co-exists throughout Orissa. The common people have their shapeless stone or block before which they make their simple offerings in the open air; while side by side with it is a temple to one of the Aryan gods with its carved image and elaborate rites. Every village pays homage to the Grām Devatī or

* *See* Chapter IV and Sir W. W. Hunter's *Orissa*, vol. i, pp. 88—95.

Thākurānī, as these stones and stocks are called, and reverence her as the tutelary goddess of their small community.*

The goddess is commonly represented by a piece of shapeless stone, smeared with vermilion and surrounded by several smaller pieces of stone, also vermilion-daubed and shapeless, which represent her children. Carved images are sometimes, though rarely, met with, and occasionally the trunk of some tree supposed to possess supernatural properties is smeared with vermilion and worshipped as the village goddess. Besides the generic name Grām Devatī, each goddess has a separate specific name, which is commonly one of the thousand names of the goddess Kālī. The general idea seems to be that she is like a mischievous old witch; and earthen-ware figures of horses, elephants and other animals are placed before her by the superstitious rustics, as it is believed that she wanders about at night.

The most noticeable feature of the Grām Devatī worship is the non-priestly caste of the men who conduct it, the Bhandāri, Māli or Rāul, or Dhobā being usually the priest. They hold small rent-free grants called "*māfi Grām Devatī*," *i.e.*, lands which were left unassessed for her worship at the time of the first regular settlement; and they also receive daily doles from the rich men of the village and weekly doles from the poorer peasants. The latter are given on Thursday, commonly regarded as Lakshmī day, or the day of the goddess of fortune, which is considered a specially auspicious day for the regular *pūjā* of the Grām Devatī. The first essential in this worship is a bath, which keeps the Thākurānī cool and well disposed towards the village. The bath includes smearing with *ghī* and turmeric; when it is completed, vermilion paint is put on, and after the toilet is over, a light oblation (*bhoga*) of fruit and sweetmeats is offered. The daily worship, including both bath and *bhoga*, costs about an anna; and if this small daily expenditure cannot be met, the priest contents himself by pouring a little water over the goddess, though sometimes even this inexpensive offering is dispensed with. The worship of the Grām Devatī is conducted with great pomp and ceremony on the Mahāstamī or second day of the Durgā *pūjā;* and special offerings of sweetmeats and fruit are made on all festive occasions.

The Thākurānī, who is supposed to possess more powers for doing or averting mischief than for doing positive good, receives special attention on the outbreak of any epidemic disease. Within her own village she is believed not to commit any mischief; and

* For a fuller account *see* Note on the Grām Devatī or Tutelary Village Deity of Orissa, by Bābu Jāminī Mohan Dās, J.A.S.B. Vol. LXXII, Part III, No. 2, 1903.

epidemics are supposed to be the work of neighbouring goddesses, whom the tutelary village goddess expels by persuasion or superior force, if she is duly propitiated. The occurrence of a single case of cholera or small-pox in the village is the signal for "Thākurānī Mārjanā" or washing of the Thākurānī. The villagers immediately raise the necessary funds by subscription, and propitiate the goddess by a cooling bath and refreshing offerings, the ceremony being repeated, if the epidemic does not cease.

The people have a peculiar means of knowing the wishes and decrees of the goddess. In almost every village there is a male or female medium, called Kālasī, through whom the goddess communicates with the people. The presentation of a betel-nut is the token of engaging the Kālasī, whose services are specially in demand on the occasion of an outbreak of cholera or small-pox. Before the time appointed for the Mārjanā, he takes a purifying bath, puts on a new cloth, and paints his forehead with vermilion. Then holding two canes in his hands, he appears before the Grām Devatī, and with dishevelled hair swings his body to and fro. After a time he begins to tremble, and in the course of his confused mutterings gives out some secrets of the village to win the confidence of the people. He then predicts evil to some and good to others, prescribing at the same time the remedies required, which take the shape of offerings to the goddess and special favours to himself. While going through these antics, the Kālasī is sometimes offered a fowl, the blood of which he drinks after pulling off the head.

Certain village goddesses are regarded as "Parama Vaishnavīs" or devoted followers of Vishnu, and animal sacrifices are not allowed before them. Probably owing to the spread of Vishnavism, such sacrifices are only made sparingly before the other goddesses; but in the Mahāstamī *pūjā* and other special *pūjās* offered in fulfilment of vows, animals are generally sacrificed. Fowls are also let loose before some of the goddesses by the upper classes of Hindus, and are killed and eaten by the lower classes.

It seems hardly open to question that this worship of the malevolent spirit, through the medium of shapeless stones, is an offshoot of the fetishism of the aborigines. It still includes, though to a restricted extent, the sacrifice of animals, which is one of the most characteristic features of aboriginal worship; and the offering of fowls, which are so rigorously excluded from the houses of the upper classes of Hindus, can hardly be said to be anything else than an aboriginal practice. The restriction of the priestly function to the Sūdra castes is another link in the chain

of circumstances which indicate the aboriginal origin of this form of worship. While the Brāhaman stood aloof, the mass of the people, leavened in their lower strata by the aborigines, adopted the faith which, by its easy explanation of the origin of evil, appealed most strongly to their simple minds. The Brāhman could not, however, long stand against the popular current which thus set in, and he eventually invented more refined forms of worshipping the same malevolent spirit.*

CASTE SYSTEM. Orissa has a complete caste system of its own, differing in many respects from that of Bengal. The Brāhman, as usual, heads the list, and the next group consists of castes of twice-born rank, of whom the Karans and Khandaits are most numerous in Purī. Then come the clean Sūdra castes, from whose hands Brāhmans will take water and *pakki* food, *i.e.*, food cooked with *ghī* as opposed to *kachhi* or ordinary cooked food. These castes are grouped in two subdivisions with reference to the degree of purity of the traditional caste occupation. The first subdivision includes the Chasās, the most numerous caste of Purī, and the Mālis, Rājus and Sudhas; in the second subdivision the castes most strongly represented in this district are the Gauras and Guriās. The fourth group consists of unclean Sūdras whose touch does not defile, but who may draw water only from masonry wells in metal vessels, and are not *jalācharaniya*, *i.e.*, the highest castes will not take water from their hands. The most numerous castes in this group are Tāntis, Golās, Thoriās, Kansāris and Kāchrās. The fifth group consists of castes whose touch defiles, among whom the most prominent are Telis, Kewats and Kumhārs. Next come castes who eat fowls and drink spirits, but who abstain from beef. There are three well-defined sub-groups: the first are served by the Dhobā and have the Jyotish as their priest; the second are not served by the Dhobā and have no priest of any kind; and the third, though comparable to the second in other respects, rank lower, mainly on account of the freedom of their women. This first sub-group includes Siyals and Chamārs; the second Dhobās, Bauris, Khatiās and Nuliyās; and the third Ahīr Gauras, Kelās and Kandrās. The last group consists of the very lowest castes and includes in this district Doms, Pāns and Hāris.†

"Nowhere else," writes Sir W. W. Hunter, "do the ancient caste rules exercise such an influence. Thus, men following precisely the same occupation are sometimes separated by so vast a social gulf, that the slightest bodily contact with each other

* Note on the Grām Devatī or Tutelary Village Deity of Orissa, by Bābu Jāminī Mohon Dās, J.A.S.B., Vol. LXXII, Part III, No. 2, 1903.

† The above classification is taken from the Bengal Census Report of 1901.

brings pollution; and the higher cannot touch any article that the lower has handled, until it undergoes purification by being put down upon mother earth. I once had a party of palanquin bearers in Orissa consisting of different castes. Not only was it impossible for two castes to join in carrying me; but each time that the different castes relieved each other, they had to place the palanquin on the road before the new relay would touch it. The higher sort loathed the lower; and beneath these latter there is a third class, who hold the same degraded position to the intermediate sort as the intermediate ones do to the upper. To this day, when a professional astrologer enters a dwelling, the mats are all taken up to avoid the pollution of his touch."

Another striking instance of the strength of caste prejudice is the existence of a caste called Chhatrakhiā, which is made up of the people who lost their caste in 1866 for eating in relief-kitchens (*chhatra*). The caste is divided into an upper and a lower sub-caste—the former comprising Brāhmans, Karans and Khandaits, the latter consisting of castes ranking below them in the social scale. Members of each sub-caste marry within that group, irrespective of the caste to which they originally belonged; and no intermarriage is possible between members of the two sub-castes. In other respects, however, the caste system in Orissa appears in some respects to be more loosely organized, and more plastic than in Bengal, for it is possible on the one hand for outsiders to be admitted into an already organized caste, and on the other, for the members of the same caste to raise themselves to membership of some higher caste. For instance, the Chasās, when they become wealthy, raise themselves to membership of the lower classes of Karans, and assume the respectable title of Mahānti.* A common saying is—*Bari bari kari Mahānti, chhidi chhidi kari Chasā, i.e.*, "Rising, rising to Mahānti; falling, falling to Chasā."

PRINCIPAL CASTES.

There are only 9 castes numbering over 25,000 as shewn in the margin. Of these, Chasās and Brāhmans alone account for nearly two-fifths of the total population.

Chasā	...	299,607
Brāhman	...	100,641
Bauri	...	84,188
Gaura	...	53,475
Sodha	...	41,080
Teli	...	38,001
Kewat	...	33,463
Karan	...	33,001
Guriā	...	25,751

Chasās.

The Chasās may be described as the characteristic caste of Purī. As their name implies, they are an agricultural caste, including the well-to-do peasantry of the villages; almost all hold land as occupancy

* N. K. Bose, C.S., *The Hindus of Purī and Their Religion*, Calcutta Review, 1891.

ryots or work for others as field-labourers. They are divided into four sects, the Orh, Benātiyā, Chukuliyā and Sukuliyā, of which the Benātiyā stands first in rank, and the Sukuliyā and Chukuliyā lowest; all the sub-castes may drink and smoke, but not eat cooked rice together. The Orh or Od Chasās, it is alleged, were the first of the tribes who settled in Orissa and began to cultivate the soil; and they claim that the country was called Orissa after them. The Benātiyās are said to have been created from a tuft of *benā* grass, or to be descended from the early settlers who first made the land fit for cultivation by clearing away the *benā* grass. The Chasās are believed to be for the most part of non-Aryan descent, the loose organization of the Oriyā caste system making it possible on the one hand for outsiders to be admitted into the caste, and on the other for wealthy Chasās who gave up ploughing with their own hands and assumed the respectable title of Mahānti to raise themselves to membership among the lower classes of Karans. The popular belief is that they are somewhat dull-witted, and this belief finds expression in a proverb—*Chasā ki jāne pasār kathā, padile bolai dash*, *i.e.*, "What does the Chasā know of the dice? At every throw he calls out 'ten.'"

Brāhmans. The Brāhmans of Purī belong, for the most part, to the Utkal class which is one of the five great territorial groups into which the Gaura Brāhmans of Northern India are divided. It is not known when this division took place, but it may perhaps be assumed that the colonies of Utkal Brāhmans were separated by local usage, as well as by geographical limits, before the wave of Buddhism passed over Orissa. Buddhism and want of communication with Northern India made them ignorant of their priestly functions and drove them to more worldly pursuits for their subsistence. Most of them resorted to agriculture, while a few are believed to have taken service as cooks in the temple of Jagannāth. In the fifth century A.D., it is said, the ruling dynasty revived the Brahmanical faith in Orissa, not by restoring priestly functions to the degraded Brāhmans, who, forsaking the Vedas, had turned cultivators and cooks, but by importing 10,000 Brāhmans of pure faith, fit to perform Vedic rites, from Kanauj, the greatest stronghold of Hinduism in Northern India. These imported Brāhmans gradually spread over the whole of Orissa, and the colonies which they formed with the aid of royal grants of rent-free lands are still known as *sāsans*.

In course of time, two endogamous subdivisions were formed on the two sides of the river Brāhmanī, the northern subdivision being called Jājpurotriya and the southern Dakshinotriya; Jājpur

is the centre of the former, and Purī district of the latter. Each territorial subdivision has been divided into two groups called Srotriya or Vaidik and Asrotriya or non-Vaidik. The former includes the Sāsani Brāhmans, who depend, for their subsistence, chiefly on royal grants of rent-free lands, and the latter includes the following classes:—(1) Sāruā or Paniāri, growers and sellers of vegetables; (2) Pandā, Pūjāri, Suāra or Deuliā, professional temple worshippers or cooks; and (3) Marhiā, priests of low castes, who receive alms from the humble clients whom they serve, and enjoy the privilege of being fed first in all feasts connected with *prāyaschitta* or purification ceremonies. The Srotriyas do not intermarry with the Asrotriyas, and the latter have no intercourse with the degraded Māstāns or Mahāstāns of the pre-Buddhistic period. The non-Brahmanical occupations and titles of the latter mark them out as a class quite distinct from the rest of the Brāhmans of Orissa; they are called Balarāmgotrī, apparently from the fact that the plough is believed to be the distinctive weapon of the god Balarām.

The Utkal Brāhmans were originally Saivas or Sāktas, but now worship the four gods Vishnu, Siva, Ganesh and Sūrya, and the goddess Durgā. Chaitanya converted some of the Brāhmans to Vaishnavism, but even these converts worship the four gods and the goddess mentioned above on ceremonial occasions. The Grām Devatī receives the same degree of homage from this caste as she does from the other castes in Orissa. The ten *sanskārs* or purifying ceremonies are a distinctive feature in the life of the Utkal Brāhman. According to the Sāstras, they should be performed at different periods of life, but in Orissa all the ceremonies are performed at the time of *upanayana* or assumption of the sacred thread. The Utkal Brāhmans observe most strictly the limits of age laid down in the Sāstras for the marriage of girls, giving them in marriage usually before ten and seldom after twelve, unlike other high castes, such as the Kshattriyas, Karans and Khandaits, whose daughters are rarely married before twelve and are sometimes kept unmarried up to what is regarded as an advanced age even among educated reformers.

Among the Utkal Brāhmans traces are found of the existence of totemistic beliefs common among Dravidian races. A Brāhman of the Atreya *gotra*, for instance, will not sit on the skin of the deer or eat its flesh. A Brāhman of the Kaundinya *gotra* similarly does not sit on the skin of a tiger, and a Brāhman of the Gautama *gotra* offers special *pūjā* to the cow on the occasion of marriage. The usage is explained, not by any direct descent from the animals revered, but by a legend that the *gotra rishis* who

were invited to the *jajna* of Daksha fled in the disguise of animals, when the *jajna* was broken up by Siva. This is no doubt a fiction invented to explain an aboriginal belief, which the Brāhmans apparently borrowed from the Dravidians with whom they came in contact. There is, however, no evidence that there was any infusion of Dravidian blood among the pure Aryans imported from Kanauj.

Bauris. The Bauris occupy a very low position in the social scale. Like the Pāns, they claim to be Hindus, but it is doubtful whether, strictly speaking, they can be said to have come within the pale of Hinduism. At any rate, the custom of worshipping trees, which still lingers among them, lends support to the theory that they originally had a more primitive belief—a religion of the woods. There appear to be some reasons for believing that they are ethnically distinct from the Bauris of Western Bengal.

Gauras. The Gauras are the great pastoral caste of Orissa, corresponding to the Goālās in Bengal and Bihār. They nearly all possess cattle, and are chiefly engaged in breeding cows and in selling milk, curds and *ghī*; they also engage in agriculture, and some serve as *muliās*, *i.e.*, hired agricultural labourers. They also work as domestic servants and very largely follow the profession of *pālki*-bearers. Many of them affect a high standard of orthodoxy, and widow marriage, which was formerly permitted, is now being forbidden.

Sudhas. The Sudhas appear originally to have been a forest tribe with nomadic habits. They are now mainly settled cultivators, but traces of their former life are still apparent. They worship a deity called Pāncha Khandā, *i.e.*, the five swords, with offerings of goats and fowls, and their tutelary goddess is Khambeswarī, whose visible representation is a wooden peg (*khamba*). The highest sept, called the Bara Sudhas, have adopted Hindu customs, and the better castes will take water from their hands.

Telis. The Telis call for only a brief mention. They are the oilmen of the country, but many of them are tradesmen; they are also known as Kuberaputras or sons of Kubera, the god of wealth.

Kewats. The Kewats are the fishermen of the district, though some have taken to agriculture, and one section, the Rārhis, parch rice. The latter section have a curious ceremony, called *Chaitaghorā*, held in the month of Chaitra, when one of them is supposed to represent a horse and parades the village with an attendant crowd.

Karans. The Karans are the writer caste of Orissa, who find employment in the service of Government or of zamīndārs as minor

officials, accountants, clerks, schoolmasters and *patwāris*; many of them are landholders. They are also called Mahāntis, but prefer the name of Karan, because that of Mahānti is often adopted by affluent Chasās and others who wish to get a rise in rank; in fact, there is a popular proverb: *Jāra nāhin jāti, tāku bolanti Mahānti*, *i.e.*, he who has no caste calls himself a Mahānti. Their usual titles are Patnāik, literally, a great (*patta*) commander (*nāyek*), or Bohidār. They are notorious for extravagance and also for shrewdness, characteristics which have given rise to two popular proverbs: the first is *Mahānti jāti, udhāra paile kinanti hātī*, *i.e.*, the Mahānti, if he can get a loan, will at once buy an elephant; the second is *Patarkatā, Tantarkatā, Pāniotā, Gaudunī mai, E chāri jāti ku biswāsanai*, *i.e.*, trust not the palm-leaf writer (Karan), weaver, distiller and milk-maid.

The Guriās are the confectioner caste of Orissa, many of whom are agriculturists holding land as occupancy ryots. Guriās.

It remains to note a few castes which are more or less peculiar to this district.

Daitā is the name of a small caste found only in Purī. On the occasion of the Snān-jātrā and Rath-jātrā festivals, the Brāhman priests, who ordinarily perform the worship of the idols in the temple of Jagannāth, stand aside, and the Daitās take their place. From time to time the old idols are replaced by new ones, and the work in connection therewith is also done by the Daitās, and not by the regular *sebaks*. They hold several rent-free villages granted them in former times as a reward for their services in the temple. Some act as *pandās*, or pilgrim guides, a profitable employment. They are believed to be of Savar origin, but their position has been raised by the nature of their employment, and they are now regarded as equal in point of rank to the Karans, whose customs they ape, and with whom they occasionally intermarry. Daitās.

Irika, Idiga or Chelia Golā, is the name of a small community who rear goats and sell milk, *ghī* and vegetables. Their headquarters are in Ganjām, whence they are said to have immigrated in recent times. Irikas.

Kāhāliā, like Daitā, is a small caste peculiar to the Purī district. They are believed to be descended from the illegitimate children of the dancing girls attached to the great temples, but they themselves not unnaturally deny this and profess to have come originally from the banks of the Ganges. They play in the temples on a wind instrument, called *kāhāli*, from which their name is derived, and sometimes describe their caste as Tali Sebaka, *i.e.*, inferior temple servants. Kāhāliās.

Kelās. The Kelās are a low caste of fowlers, jugglers and beggars, who are said to have come from Madras about 40 years ago. They are a gipsy-like race of nomadic habits, divided into five sub-castes, viz., Naluā or Patrasaurā, Sāpuā, Mātiā, Gandiā and Sabākhiā or the omnivorous ones. With the exception of the Naluās, the Kelās speak a mixture of Oriyā and Telugu, which in the case of the Sabākhiās approaches much more nearly to Telugu than to Oriyā. The Naluās, on the other hand, are said to speak an archaic form of Bengali, and differ greatly in appearance from the other sub-castes, being of fair complexion with well-marked Mongoloid features. The Naluās catch and sell birds, the Sāpuās exhibit snakes, the Mātiās are earth workers, and the Sabākhiās are professional beggars. The section last mentioned will eat anything, even dead snakes; they wear a plume of feathers in their turbans; they paint their faces; and they are said to frighten people into giving them alms by cutting their bodies and vomiting in front of their houses. Begging, however, is by no means a monopoly of this sub-caste. The begging party usually consists of a man with his wife and child, the woman singing and dancing, while the man plays on a rude instrument called *dhurukī*. They move about in gangs of from 10 to 50 persons, and take up their quarters under trees or in market sheds. Some of them make mats from the leaves of the date-palm, fans of peacock feathers, and the arrows, called *kāndasara*, used by some of the higher castes in certain religious ceremonies.

Kumutis. The Kumutis, who are practically confined to Purī and some of the Tributary States, are said to have migrated from Ganjām in the Madras Presidency; intermarriage with their caste-fellows in Ganjām still exists. They are usually pedlars or grocers; a few are zamīndārs, while the poorest among them collect and sell the leaves of the *sāl* tree (Shorea robusta). They marry by preference the daughter of their maternal uncle; if there be none such, they must obtain the consent of their caste-fellows before they can marry any one else.

Nuliyās. The Nuliyās are a caste of fishermen and boatmen who have migrated to Purī from Madras. There are two sub-castes called Jāliyā and Khalāsi. The former are fishermen, and the latter work in sea-going vessels; some dig earth, pull punkhas and carry loads. The rule among them, as among the Kumutis, is that a man should, if possible, marry his first cousin. A widow may marry again, and it is thought proper for her to espouse her first husband's younger brother. The sons inherit, but if there are no sons, the property is taken by the community. They profess to be followers of Rāmānuja, and worship Baruna, the Hindu Neptune,

with offerings of flowers and sweetmeats before launching a boat or casting a net. They are found in Purī, Nuāgaon, Arakuda, Mānikpātnā, Khirisai, Sahadi and Rāmlenkā.

The Sārāks are an archaic community, of whom Mr. Gait gives the following account in the Bengal Census Report of 1901. The word Sārāk is doubtless derived from Srāvaka, the Sanskrit word for "a hearer." Amongst the Jains the term was used to indicate the laymen or persons who engaged in secular pursuits as distinguished from the *Yatis*, the monks or ascetics; and it still survives as the name of a group which is rapidly becoming a regular caste of the usual type. The Buddhists used the same word to designate the second class of monks, who mainly occupied the monasteries; the highest class of Arhats usually lived solitary lives as hermits, while the great majority of the Bhikshus, or lowest class of monks, led a vagrant life of mendicancy, only resorting to the monasteries in times of difficulty or distress. In course of time the Sārāks appear to have taken to weaving as a means of livelihood; and this is the occupation of the Orissa Sārāks, who are often known as Sārāki Tānti. Sārāks.

There are four main settlements in Orissa, viz., in the Tigiriā and Barambā States, in the Bānki thāna in Cuttack, and in Piplī thāna in Purī. The Purī Sārāks have lost all connection with the others, and do not intermarry with them. Though they are not served by Brāhmans, they call themselves Hindus. They have no traditions regarding their origin, but like other Sārāks are strict vegetarians. The Sārāks assemble once a year (on the Māgh Saptamī) at the celebrated cave temples of Khandagiri to offer homage to the idols there and to confer on religious matters. The only offerings at Hindu temples of which they will partake are those made at Purī to Jagannāth, who is often said to be of Buddhistic origin.

The Oriyās have an era distinct from the Christian, the Muhammadan and the Hindu methods of reckoning time. It is based on the reigns of the ancient Rājās of Khurdā, whose descendants have lost the territory held by their ancestors, but have a spiritual principality, as they are in charge of the temple of Jagannāth. The most striking characteristics of this era are as follows. The figure 1 and all figures ending in 0 and 6, except 10, are omitted. The last *anka* year of one king and the first *anka* year of the succeeding king fall in the same year. The year begins on the twelfth *tithi* of the bright half of the month of Bhādra.* CHRONOLOGY.

* J. A. S. B. Vol. LXXII, 1903, Part I, p. 100.

Regarding this chronology, which is still used in Oriyā almanacs and also in documents, Sir William Hunter writes :—" Orissa has always been prolific of prophecies dated according to the local era, prophecies in which the people firmly believe, and which sometimes bring about their own fulfilment. The Vishnuvite mendicants keep the manufacture of them in their own hands, and work them for their own purposes. For example, the income-tax touched in an unprecedented manner their monastery lands; and the unsettled feeling arising from the bewildering succession of license, certificate and income-taxes in late years prepared the peasantry for the most extravagant portents and omens. Among the spawn of prophecies which accordingly spread like wild fire through Orissa, one had eventually the honour of being noticed in the Government Gazette. It ran somewhat as follows: 'Take heed of the 13th *anka* (or year of the Mahārājā's reign). In the 14th *anka* a great battle will take place; in the 15th there will be nothing left to eat; in the 17th the truth will come'. A million of peasants went in fear and trembling for many months at the sound of these mystic words. The prediction of the general extermination of the people for some time actually held back the husbandmen from tilling their fields." *

* W. W. Hunter, *Orissa* (1872), Vol. II, p. 126.

CHAPTER IV.

THE WORSHIP OF JAGANNATH.

THE history of religion in the Purī district is of special interest, as at one time or another it has been the home of such widely different cults as Animism, Vedic Brāhmanism, Buddhism, Jainism and Paurānik Brāhmanism, including Saivism, Sun-worship and Vaishnavism. The earliest of these religions is Animism, which dates back to prehistoric times and still lingers among some of the wilder races on the western border, such as the Savars and Pāns. The Pāns are more Hinduized than the Savars; but both tribes still practise ancestor-worship and totemism, and make offerings to deities represented by rude stone images and propitiated by sacrifices of animals. Other instances of the influence exercised by Animism over the uneducated masses will be found in the account of the worship of the Grām Devatī given in the preceding chapter. The Vedic religion of nature-worship was introduced by the Aryan immigrants who made their way into Orissa in the early centuries. This cult, however, was largely modified by the primitive beliefs of the surrounding aboriginal population and by the want of communication between Orissa and the more highly civilized country of Northern India. Consequently, so corrupt did the religion of these Aryans become that the Brāhmans of Madhyadesh, the home of later Vedic religion, called them Vrātyas, and refused to recognize them as Brāhmans or Kshattriyas. Their descendants have probably survived in the modern Māstān Brāhmans.

DEVELOPMENT OF RELIGIONS.

With the conquest of Kalinga by Asoka in 261 B.C., Orissa became a part of the Mauryan empire, and came into touch with the three religions then prevalent in Northern India, *viz.*, Brāhmanism, Buddhism and Jainism. The references in the Mahābhārata to Kalinga, and the descriptions of Birajā *kshettra* and the sea *tīrtha*, seem to show that later Vedic Brāhmanism obtained a foothold in Orissa, and traces of its influence may

This Chapter has been written in collaboration with Bābu Monmohan Chakravarti, M.A., B.L., Assistant Superintendent, Gazetteer Revision, Bengal. Bābu Rāj Kishor Dās, Manager of the Jagannāth Temple, has kindly revised the draft and furnished valuable information.

still be found in the existence of Agnihotri Brāhmans at Jājpur and elsewhere. Buddhism of the early type was presumably introduced by the officers of Asoka and their followers, but no traces of it have survived. Jainism was more successful, as it was patronized by Khāravela and his successors, and on the decline of the Mauryan empire it lingered on till the 11th or 12th century A.D. It has now entirely disappeared from the district, but it has left its traces in the hills of Khandagiri and Udayagiri, which are honey-combed with Jaina caves, built between the third and first century B.C., in which the worship of Pārsvanātha is more prominent than that of Mahāvīra.

About the second century A.D. Orissa seems to have been absorbed in the Andhra empire, and Buddhism and Brāhmanism both came into prominence. According to traditions preserved in the Tibetan chronicles, Nagarjuna, the great preacher of the Mahāyāna system (*circa* 200 A.D.), converted the king of Orissa (O-tisa), while the Buddhist philosopher Dignāgāchārya lived in U-tcha or Northern Orissa and there composed his work on logic *Pramānasamuchchya* (*circa* 500 A.D.). Further proofs of the prevalence of Buddhism are to be found in the travels of Hiuen Tsiang (Yuan Chwang) and in the Japanese accounts of the Chinese Tripitakas, which describe the sending to China of a Buddhist scripture by the king of Orissa (U-tcha) in the eighth century A.D. This Buddhism gradually changed into the latest type, the Tāntrik system of Magadha, remains of which may still be found in the Assiā hills in the Cuttack district and the Kupāri hill in the Balasore district. But in Purī district Buddhism has left no remains, probably because it was dominated from an early time by Paurānik Brāhmanism, the worship of Siva, of the Sun, and of Krishna in the form of Jagannāth.

Saivism was apparently the first of these cults to become predominant. It had its chief centre at Bhubaneswar, where it is represented by phallic symbols, the *linga* and the *yonī*, enshrined in temples, whose size, massive structure and elaborate carvings still excite admiration, and indicate how strong was the hold of this faith on both the royal house and the people. Sun-worship held a minor position, and is commemorated chiefly by the magnificent remains of the Konārak temple. With the change of dynasties which took place, a change came over the spirit of religion. The Ganga and the Sūrya dynasties did not neglect Saivism, but patronized Vaishnavism more liberally; the erection of the great temple of Jagannāth being among the first fruits of this change. Eventually, Krishna-worship, with the help of royal patronage, the encouragement of the numerous

pandās of Jagannāth, and the preaching of Vaishnavite apostles, like Chaitanya, Jagannāth Dās and others, spread over the land, superseding other Paurānik faiths. Gradually to the worship of Krishna alone was added the worship of his beloved Rādhā, and now this dual worship forms the prevalent religion in Orissa, while Saivism is confined to Brāhmans, and Saktism to a few Bengali settlers and some of the lowest castes.

LEGEND OF JAGANNATH. The legend of the origin of Jagannāth is briefly as follows:* In the golden age, Indradyumna, king of Mālwā, sent out Brāhmans to seek for Vishnu, one of whom, named Vidyāpati, travelled through the jungle till he came to the country of the aboriginal Savars. There he dwelt in the house of a fowler, named Viswābasu, who was a servant of the god Jagannāth, and went daily into the jungle to offer him fruits and flowers in secret. The Brāhman won the confidence of Viswābasu, and the latter, as a proof of his friendship, showed him his god in the form of a blue stone image at the foot of a fig tree. But the god came not to partake of the offering of Viswābasu. Only a voice was heard saying: "O faithful servant, I am wearied of thy jungle flowers and fruits, and crave for cooked rice and sweetmeats. No longer shalt thou see me in the form of thy blue god. Hereafter I shall be known as Jagannāth, the Lord of the World."

The Brāhman Vidyāpati now returned to tell the king of his discovery. In joy at the good news, Indradyumna set out with a vast army, cut a road through the dense forest, and at length arrived at the holy spot, only to find that the blue image had disappeared; for the day the Brāhman left, it had been miraculously caught up in a sand-storm. In bitter disappointment, the king performed certain penances, in order to propitiate the god, and then heard a voice from heaven saying that if he offered a thousand *asvamedha* sacrifices, he would be blessed by the sight of Vishnu, in the shape not of the blue image, but of a log with certain marks on it. Indradyumna performed the necessary sacrifices, and the god thereupon appeared in the form of a log floating in the sea. This was brought to land and installed with great ceremony in the enclosure in which he had performed the *asvamedha* sacrifices (identified with the present site of Jagannāth's garden house).

The king then gathered together all the carpenters in his country, and ordered them to fashion the log into an image of

* The legend as given in the Mādalā Pānji or palm-leaf chronicles of Jagannāth differs considerably from that given by Sir William Hunter, which was based on oral tradition. Where the two accounts differ, the former has been followed as being the more authoritative version.

Jagannāth. But when they put their chisels on the wood, the iron lost its edge; and when they struck them with their mallets, the mallets missed and crushed their hands. At last, Vishnu came down in the form of an aged carpenter and offered to make an image of the log, if he was shut up alone with it for 15 days. At the end of the allotted time Indradyumna found that the carpenter had disappeared and had left three images (of Jagannāth and his brother and sister) fashioned from the waist upwards, Jagannāth and his brother having only stumps for arms, while his sister had none at all:—even so they remain to this day. Indradyumna built a temple 100 cubits high for their reception, and then, as Brahmā alone could consecrate the images and shrine, went to heaven to bring him down to earth. Brahmā came in a moment, but with Brahmā a moment lasts for many ages of mortal life; and in the meantime a new king ruled over the land. This king, learning that Indradyumna claimed the temple, prepared to resist him with armed force, but was soon reconciled when Indradyumna assured him of his peaceful purpose. The images were then brought down in cars to the temple, placed on a throne, and consecrated by Brahmā.

This legend, Sir William Hunter says, proclaims Jagannāth not less the gods of the Brāhmans than of the low caste aboriginal races. "We find the aboriginal people worshipping a blue stone in the depths of the forest; but the deity has grown tired of the jungle offerings of the primitive people, and longs for the cooked food of the more civilized Aryan race. When the Aryan element at length comes on the scene, the rude blue stone disappears, and gives place to a carved image." In other words, the legend "shadows forth the original importation of Vishnu-worship by an Aryan king from the north-west, and its amalgamation with the aboriginal rites existing in Orissa."

THEORIES OF BUDDHIST ORIGIN.

Elsewhere Sir William Hunter seems to ascribe a Buddhist origin to the worship of Jagannāth. "Jagannāth," he says, "represents, with unmistakeable clearness, that coalition of Brāhman and Buddhist doctrines which forms the basis of Vishnu-worship. In his temple are three rude images, unconsciously representing the Brahmanical Triad. His Car Festival is probably a once-conscious reproduction of the Tooth Festival of the Buddhists, although its original significance has dropped out of sight. The Chinese pilgrim Fa Hian gives an account of the yearly procession of Buddha's sacred tooth from its chapel to a shrine some way off, and of its return after a stay there. This was in the fifth century A.D., but the account applies so exactly to the Car Festival of Jagannāth at the present day, that

Fergusson pronounces the latter to be merely a copy.* A similar festival is still celebrated with great rejoicing in Japan. As in the Indian procession of Jagannāth, the Japanese use three cars; and Buddha sits in his temple, together with two other figures, like the Jagannāth Triad of Orissa."†

The procession of Buddha's tooth alluded to above took place in Ceylon, but we also find a detailed account by Fa Hian of a car festival at Pātaliputra (Patna). "Every year," he writes, "on the eighth month they celebrate a procession of images. They make a four-wheeled car, and on it erect a structure of five storeys by means of bamboos tied together. This is supported by a king-post, with poles and lances slanting from it, and is rather more than twenty cubits high, having the shape of a tope. White and silk-like cloth of hair is wrapped all round it, which is then painted in various colours. They make figures of *devas*, with gold, silver, and lapis lazuli grandly blended, and having silken streamers and canopies hung out over them. On the four sides are niches with a Buddha seated in each, and a Bodhisattva standing in attendance on him. There may be twenty cars, all grand and imposing, but each one different from the others. On the day mentioned, the monks and laity within the borders all come together; they have singers and skilful musicians; they pay their devotions with flowers and incense. The Brāhmans come and invite the Buddhas to enter the city. These do so in order, and remain two nights in it. All through the night they keep lamps burning, have skilful music, and present offerings. This is the practice in all the other kingdoms as well."‡ Such car festivals took place several centuries before Fa Hian's visit, for Asoka's Rock Edict IV inscribed in 256 B.C. records the fact that "instead of the sound of the war-drum, the sound of the drum of piety is heard, while heavenly spectacles of processional cars, elephants, illuminations, and the like, are displayed to the people."

The view that the worship of Jagannāth is an adaptation of some cult of Buddhism has been supported by other arguments. It has been held that Purī was probably the place where the famous tooth relic of Buddha was worshipped, and it is pointed out in this connection that the wooden image of Jagannāth contains a certain article, about which the priests preserve inviolate silence, and which is never replaced by a new piece whenever the image is renewed. According to tradition, one of the immediate followers of Buddha gained possession of one of his teeth when

***History of Architecture*, Vol. II, p. 590 (ed. 1867).

† Sir W. W. Hunter, *The Indian Empire*, 1893.

‡ Legge's translation.

the relics of his master were distributed and conveyed it to a place in Kalinga, afterwards called Dantapura, the city of the tooth. This city has been identified by some with Purī, and among others by Sir William Hunter, who says that "the golden tooth of Buddha remained for centuries at Purī, then the Jerusalem of the Buddhists as it has for centuries been of the Hindus." It was subsequently seized and carried off by a king who reigned at Pātaliputra; about 300 A.D. a princess of Kalinga surreptitiously conveyed it in her hair to Ceylon, and after numerous adventures and vicissitudes, it at last returned to Kandy, where it is worshipped to this day.*

As mentioned later, there are good grounds for doubting the identification of Dantapura with Purī, but there appears to be a local belief that Purī was once an ancient Buddhist site. A tradition lingers that many centuries ago a large Buddhist stūpa stood on a sand hill on the present site of Purī and another smaller one 12 miles inland at what is now Satyabādī. A few miles to the north of the larger stūpa a wide river ran into the sea, which here curved into a bay. But gradually the sea receded, and the land silted up. The stūpa fell into ruins, and eventually king Indradyumna built a temple on the platform on which it had stood. This tradition tallies with the legend of Jagannāth as given by Sir William Hunter. Indradyumna, it is said, having heard from his Brāhman emissary of the discovery of Jagannāth, came and built a temple for the god. "When the temple was finished, he asked Brahmā to consecrate it; but Brahmā had just begun his devotions, which last for nine ages of mortal men. Meanwhile, the city that Indradyumna had built round the temple crumbled into ruins, and the lofty fane itself was buried under the drifting sand of the sea. One day, as the king of the place was riding along the beach, his horses stumbled against the pinnacle of the forgotten shrine. Then his servants dug away the sand, and there was the temple of lord Jagannāth, fair and fresh as at the time of its building."

Three other reasons advanced in favour of the Buddhist origin of Jagannāth may be mentioned. The abolition of caste rules in regard to the *mahāprasād* or the sacred food cooked in the temple reminds one of the protest of Buddhism against caste prejudices. In some modern representations of the ten incarnations of Vishnu the place of the ninth or Buddha incarnation (*avatāra*) is occasionally occupied by the figure of Jagannāth. The crude form of the images of Jagānnāth, his

* Sir M. Monier-Williams, *Buddhism* (p. 500), 1889.

brother Balabhadra and his sister Subhadrā, with their round shapeless heads and their arms represented by stumps only, is believed by some to be of Buddhist origin, *e.g.*, General Cunningham says in *The Ancient Geography of India* :—"The three shapeless figures of Jagannāth, and his brother, and sister, are simple copies of the symbolical figures of the Buddhist Triad, Buddha, Dharma and Sangha, of which the second is always represented as a female. The Buddhist origin of the Jagannāth figures is proved beyond all doubt by their adoption as the representative of the Brahmanical *avatāra* of Buddha in the annual almanacs of Mathurā and Benāres."

Again, in his monograph on the Bhilsa Topes, General Cunningham suggested that the shape of the images was derived from two Buddhistic symbols, viz., an open *trisūla* placed on a wheel. This view is also supported by Count Goblet D'Alviella, who in *The Migration of Symbols* quotes instances of the *trisūla* being converted into an anthropoid figure, and goes on to say :—"A transformation of the same kind, but still more accentuated, is observable in the three famous idols of Purī, which General Cunningham long ago proved to be three ancient *trisūlas*. These emblems were doubtlessly a great object of popular veneration at the period when Puri was a Buddhist sanctuary. When Brāhmanism came to establish itself there, it contented itself with changing them by means of a few slight alterations into the image of Vishnu, or rather Jagannāth, and his brother and sister. In thus appropriating the old solar symbol still discernible in spite of its successive alterations, Vishnu, moreover, did nothing but recover what belonged to him, since he is, in Hinduism, pre-eminently the solar divinity."

Other arguments in favour of the Buddhist origin of Jagannāth are deduced from the general spirit of his worship. Thus, Mr. Fergusson writes :—"Everything at Purī is redolent of Buddhism, but of Buddhism so degraded as to be hardly recognisable by those who know that faith only in its older and purer form." Sir Monier Williams, again, says in *Buddhism* :—"Vaishnavism took care to adopt all the popular features of Buddhism. It vied with Buddhism in inculcating universal love, toleration, liberality, benevolence, and abstinence from injury. It preached equality, fraternity, and even in some cases the abolition of caste distinctions. It taught a succession of incarnations or rather descents (*avatāra*) of divine beings upon earth (as Buddhism taught a succession of Buddhas), and it even adopted the Buddha himself as one of the incarnations of Vishnu. This, indeed, is the best explanation of what has happened at

Purī in Orissa, where a temple once dedicated to Gautama Buddha, and supposed to contain a relic of his burnt body, was afterwards dedicated to the Jagannāth form of Krishna and supposed to enshrine one of his bones, and where low caste and high caste both eat together the food cooked in the house of that popular god."

The theory that the worship of Jagannāth is of Buddhist origin appears also to have been adopted in so recent a work of reference as *The Imperial Gazetteer of India* (1907), which describes Jagannāth as "that unconscious representative of a coalition of Brâhman and Buddhist doctrine who is to the devout Hindu the very type of the Vaishnav faith. On the yellow shores, where beats the eternal unresting surf, millions of pilgrims collect once a year to render homage to the god whom they ignorantly worship with a ritual that once was purely Buddhist." Similarly, Dr. Hopkins says in *The Religions of India* :—"The Jagannāth temple was once dedicated to Buddha. Name, temple, and idol-car are now all Vishnu's!"

On the other hand, there are weighty reasons for rejecting the theory of a Buddhist origin. The legend of Buddha's tooth is after all only a legend, the historical basis of which has not been proved; and it is very doubtful whether Dantapura, the city of the tooth, can be identified with Purī. Modern scholars hold that this town, the Dantakura of the Mahābhārata and the capital of Kalinga, should with greater probability be identified with Pliny's Dandagula near the Godāvari river; and it is noticeable that no mention of Purī town or Purusottama *Kshetra* has been found in any works older than some of the latest Purānas. Again, the similarity between the form of the image and the Buddhistic symbols of an open *trisūla* on a wheel, though curious, is not convincing; for such symbols are as common to Hinduism as Buddhism, the *trisūla* being a well-known symbol of Saivism and the wheel of Vaishnavism. At least, the anthropoid development of the *trisūla* is sufficient to account for the modern triple image, though it is also possible that they are imitations of crude images originally set up by the aboriginal Savars. At Mukhalingam in the Ganjām district there is a large temple of Siva, called Mukhalingeswar, to which is ascribed a connection with the Savars similar to that given in the legend about Jagannāth.

As regards the Car Festival, it is noticeable that cars are used not only in Purī for the worship of Jagannāth, but also in Bhubaneswar for the worship of Siva, in Jājpur for the worship of the goddess Birajā, and also in many temples to the south.

Moreover, the procession of cars of the gods is, as shewn above, mentioned in one of Asoka's Edicts, and is probably pre-Buddhistic. The eating of *mahāprasād* by all castes from the same plate is a custom also found in Bhubaneswar and outside Orissa, while the substitution of Jagannāth for Buddha as the ninth *avatāra* is purely local, Balarām and Krishna being substituted in other instances. Lastly, one of the strongest arguments, the finding of relics, can be traced to the Vedic period as a very old custom,* and the oldest Buddhist work, the *Mahāparinirvāna-Sutta*, describes the cremation and erection of funeral monuments over the ashes of Buddha himself.

VAISHNAVISM. Early reformers.

Whatever may be the origin of Jagannāth, it is at least certain that, in the eyes of his true believers, he is the Lord of the World. This pre-eminence dates back to the end of the 14th century, when the reformation began which made the worship of Vishnu a national religion in Northern India. The earliest apostle of Vaishnavism in this part of India was Rāmānand, who proclaimed the divinity of Rāma and the equality of man before God. His work in Hindustān was carried on by Kabīr, who tried to build up an eclectic religion that would embrace Hindu and Muhammadan alike, preaching that the God of the Hindu is also the God of the Musalmān. In a recent work, *Kabīr and the Kabīr-panth*, by the Rev. G. H. Westcott (Cawnpore, 1907), the view is advanced that Kabīr (1440–1518 A.D.) was a Muhammadan by birth and was associated with the Sufi order, that the great object of his life was to break down the barriers that separated Hindus from Muhammadans, and that, in order to achieve this object, he resided in Benāres and associated with the followers of Rāmānand. A monastery called after his name exists at Purī at the present day, and it is probably this to which Tavernier referred in his account of the Jagannāth temple, in which he said :—"Near the pagoda the tomb of one of their prophets, called Cabir, to whom they do great honour, is to be seen."

Chaitanya.

Rāmānand and Kabīr were the apostles of Vaishnavism in Hindustān, but Chaitanya (1485–1527) was its prophet in Bengal and Orissa. Signs and wonders, we are told, attended him through life, and on the lonely shores of Purī he received heavenly visions and revelations. On one occasion he beheld the host of heaven sporting upon the waves, and plunged into the sea in a religious ecstasy, but was miraculously brought back to land in a fisherman's net. Apart from these and other legends we know

* Dr. Caland, *Die alteridischen Todten-und Bestattungs-gebranche*, 1896.

that Chaitanya, when he was 24 years old, forsook the world, and devoted the rest of his life to extending the worship of Jagannāth. With regard to his doctrines there is ample evidence. He preached vehemently against the immolation of animals in sacrifice and the use of animal food and stimulants, and taught that the true road to salvation lay in Bhakti, or fervent devotion to God. He recommended Rādhā worship and taught that the love felt by her for Krishna was the highest form of devotion. The acceptable offerings were flowers, money and the like; but the great form of worship was the Sankīrtan or procession of worshippers playing and singing.*

The doctrines of Chaitanya found ready acceptance among the Oriyās, by whom he is regarded as an incarnation of Krishna and Rādhā. "The adoration of Chaitanya has become a sort of family worship throughout Orissa. In Purī there is a temple specially dedicated to his name, and many little shrines are scattered over the country. But he is generally adored in connection with Krishna; and of such joint temples there are 300 in the town of Purī, and 500 more throughout the district. At this moment, Chaitanya is the apostle of the common people. The Brāhmans, unless they happen to enjoy grants of land in his name, ignore his work. In almost every Brāhman village the communal shrine is dedicated to Siva; but in the villages of the ordinary husbandmen, it is Krishna who is worshipped with Rādhā, and Chaitanya who is remembered as the great teacher of the popular faith."†

The strict followers of Chaitanya are known as Gauriyās; but in the religious ferment created by the preaching of Chaitanya and his disciple Jagannāth Dās, several other subsects came to be formed in Orissa.

Later phases. The difference between the doctrines of the early reformers and the later developments of the cult has been forcibly expressed by Dr. Grierson:—"Rāmānand, the popularizer of the worship of Rāma, flourished about the year 1400; and even greater than he was his famous disciple Kabīr, who succeeded in founding a still existing sect, which united the salient points of Muhammadanism and Hinduism. Here we first touch upon that marvellous catholicity of sentiment of which the key-note was struck by Rāmānand, which is visible in the doctrines of all his successors, and which reached its truest height in the lofty teaching of Tulsī Dās two centuries later. The worship of the deified prince of Oudh and the loving adoration of Sītā, the perfect wife and the perfect

* E. A. Gait, *Bengal Census Report of 1901.*

† Sir W. W. Hunter's *Orissa.*

mother, have developed naturally into a doctrine of eclecticism in its best form—a doctrine which, while teaching the infinite vileness of mankind before the Infinitely Good, yet sees good in everything that He has created, and condemns no religion and no system of philosophy as utterly bad, that inculcates, Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy strength, and with all thy mind; and thy neighbour as thyself. Far different has been the fate of that other great branch of the Vaishnava religion which is founded on mystic interpretations of the love which Krishna bore to Rādhā. Beautiful in itself, its passionate adoration, whose inner meaning was too esoteric for the spirits of the common herd of disciples, in many cases degenerated into a poetry worthy of only the baser sorts of Tāntrik Siva worshippers. But at its best the Krishna cult is wanting in the nobler elements of the teaching of Rāmānand. Its essence is almost selfish, a soul-absorbing, nay all-absorbing, individual love cast at the feet of Him who is love itself. It teaches the first and great commandment of the Christian law, but the second, which is like unto it—Thou shalt love thy neighbour as thyself—it omits."*

CATHOLIC NATURE OF THE WORSHIP

The above is a brief account of the history of Vaishnavism, and it will suffice to add a sketch of its present position, as described by Mr. N. K. Bose, sometime Collector of Purī, in *The Hindus of Purī and their Religion* (Calcutta Review, 1891). "Jaganāth is the great god of the people of Orissa. All who call themselves Hindus are entitled to worship him, and, excepting the pronounced aboriginal tribes and those low castes who are engaged in offensive occupations, all are entitled to enter the precincts of the temple. For the excluded classes there is an image at the entrance gate called Patitpāban Hari, to whom they can offer their homage. The worship of Jagannāth is for the highest minds among the Hindus a pure system of theism. To the polytheistic multitude it offers the infinite phases of divinity as objects of worship and provides for their delectation an infinite number of rituals and ceremonies. In a word, it supplies the spiritual requirements of different classes of Hindus in different stages of their intellectual development. Under its broad all-receptive roof doctrines the most divergent find a resting-place. There you see the learned *pandit* of the Sankarāchārya monastery seeking salvation by the way of spiritual knowledge. Here you find a large number of Saiva *sannyāsis* voluntarily enduring

* G. A. Grierson, *The Modern Vernacular Literature of Hindustan*, J.A.S.B., Part I, 1888; do., Journal, Royal Asiatic Society, 1907, p. 319 *et seq.*

excruciating torture and misery, and seeking absorption into the deity by severe austerities. You also see a large number of devotees consecrating their entire soul as it were to Hari with outpourings of love and affection. Jagannāth is an unsectarian name. All Hindu sects worship at its shrine. The followers of Sankarāchārya, Rāmānuja, Rāmānand, Kabīr, Chaitanya and Nānak are to be seen doing homage to the great god. Even the Jains of the Dīgâmbar sect flock to the temple at a certain season of the year. The common link of all these sects is their belief in the supremacy of Jagannāth; and their differences consist in the character which they assign to his supremacy, in their religious and other practices founded on the nature of such beliefs, and in their sectarian marks."

EXCLUDED CLASSES.

Not unnaturally, Jagannāth has a secure place in the affections of the Oriyās, most of whom wear the *kanthi* (*i.e.*, a piece of *tulsī* wood worn on the neck) as a distinctive mark of a Vaishnava, and change their family title to Dās (*i.e.*, servitor) as a token of their devotion. Not all, however, may enter the temple and see the god. "The temple of Jagannāth," says Sir William Hunter, "in which every creed obtain an asylum, and in which every class and sect can find its god, now closes its gates against the low caste population. Speaking generally, only those castes are shut out who retain the flesh-eating and animal-life-destroying propensities and professions of the aboriginal tribes. A man must be a very pronounced non-Aryan to be excluded. Certain of the low castes may enter half way, and, standing humbly in the court outside the great temple, catch a glimpse of the jewelled god within. But unquestionable non-Aryans cannot go in at all. The same ban extends to those engaged in occupations either offensive in themselves, or repugnant to Aryan ideas of purity, such as wine-sellers, sweepers, skinners, corpse-bearers, hunters, fishers and bird-killers. Basu the fowler would now be driven from the doors of the temple dedicated to his own god. Criminals who have been in jail, and women of bad character, except the privileged temple girls, are also excluded, with this difference, however, that a criminal may expiate the defilement of imprisonment by penance and costly purifications; but a woman once fallen can never more pass the temple gates."

The following are excluded:—1. Christians and Jews; 2. Muhammadans; 3. Hill or forest races; 4. Savars; 5. Pāns; 6. Hāris (except to clear away filth); 7. Chamārs; 8. Doms and Chandāls; 9. Chiriāmārs (bird-killers); 10. Siyals (wine-sellers); 11. Gokhās (fishermen); 12. Siulās (fishermen); 13. Tiyars (fishermen); 14. Nuliyās (Telinga boatmen); 15. Kandrās (a low Oriyā

caste); 16. Common prostitutes. Criminals who have been in jail and had jail diet may not enter unless they have performed a ceremony of purification, while Bauris may enter the outer court only.*

It is said that an European in disguise succeeded in entering the temple at night in the first half of the 19th century, but was discovered before he could penetrate to the inner sanctuary. His presence necessitated the purification of the temple.

TEMPLE.

The shrine of Jagannāth, like other shrines in Orissa, consists of a suite of four buildings standing in line with chambers opening one into another. There are numerous other shrines within the temple enclosure, but these four may be regarded as peculiarly the shrine of Jagannāth. They are, proceeding from east to west:—(1) the Bhoga-mandapa or hall of offerings, where the *chhattrabhoga* or offerings made by the *maths* and private persons is presented; (2) the Jagamohana also called the Nāt-mandapa or dancing hall; (3) the Mukhsiāli, the hall of audience, in which the pilgrims assemble to gaze upon the god; and (4) the Baradeul or inner sanctuary of Jagannāth, surmounted by a lofty conical tower, in which the *kothbhoga* or offerings provided from temple funds are presented. A fuller description of the temple will be found in the article on Purī town in Chapter XVI.

IDOLS.

In the Baradeul Jagannāth, his brother Balabhadra (also called Bara Thākur) and his sister Subhadrā are enthroned on the Ratnavedi or Singhāsan, a throne of chlorite about five feet high. The images are of wood, and there are also miniature metal images of Lakshmī and Saraswatī, besides an image called Sudarsan Chakra (the name for the wheel of Vishnu). The three principal images are described by Brij Kishore Ghose in the *History of Pooree* as "bulky, hideous, wooden busts. The elder brother Balabhadra is six feet in height, the younger Jagannāth five feet, and their sister Subhadrā four feet: They are fashioned into a curious resemblance of the human head resting on a sort of pedestal. They are painted white, black, and yellow respectively; their faces are exceedingly large, and their bodies are decorated with a dress of different coloured cloths. The two brothers have arms projecting horizontally forward from the ears. The sister is entirely devoid of even that approximation to the human form."

Being of wood, the images require periodical renewal, and this is a matter about which there is considerable mystery. The account given in the *History of Pooree* quoted above is that "a

* The list given by Sir William Hunter has been revised from information supplied by the Manager of the Jagannāth Temple.

nīm tree is sought for in the forests, on which no crow or other carrion bird has ever perched: it is known to the initiated by certain marks. The idol is prepared by the carpenters, and then entrusted to certain priests, who are protected from all intrusion. The process is a great mystery. A boy from a Pati's family is selected to take out from the breast of the old idol a small box containing quicksilver, said to be the spirit, which he conveys inside the new. The boy who does this is always removed from the world before the end of the year." Other accounts are given by Mr. Crooke in an article on "Juggurnaut" in *Things Indian*:—"When the stock is shaped by the carpenters, it is made over to the priests, one of whom is selected to take out of the original image a box containing the bones of Krishna, which is then transferred to the new image. One account describes how this Brāhman veils his face lest he should be struck dead in gazing on relics of such sanctity. Once, it is said, a Rājā of Burdwān paid the priests an enormous sum for permission to see the relics and died soon after. Others say that the Brāhman who handles the relics is slain by his brother priests lest he should divulge their character, or that he is always removed by the god from this world before the close of the year. These tales, in their present form, are obviously absurd. The rule of Vaishnavism is utterly opposed to the preservation of relics of the dead. The tale, in fact, points to a tradition from Buddhist times, when relics of the master were preserved in stūpas all over the land."

The present practice is reported by the Manager of the Temple to be as follows. When the new image is ready, a certain article is taken out of the old one and placed in it by a priest of the Pati family: the latter are the traditional descendants of the Brāhman Vidyāpati, who first discovered the abode of Jagannāth. This article is called the Brahma-padārtha. The priest is blindfolded and his hands are swathed in cloth, so that he may neither see nor touch the sacred article. When he has placed it in the new image, the opening is closed by a carpenter of a certain family.

RITUAL.

The service of the temple consists partly in a daily round of oblations, and partly in sumptuous ceremonials at stated periods throughout the year. The offerings made to Jagannāth and the other deities enshrined in the temple enclosure are bloodless, consisting of fruit, flowers and various articles of vegetable food. To this rule there is one exception in the offerings made for three days in the year to Bimalā, who has a shrine in the temple compound. She generally receives offerings of vegetable food, but on each of the three nights of the Durgā *pūjā* she is given

offerings of two sheep and of fish specially caught in the Narendra tank, where ordinarily no net may be thrown. The offerings are made at a late hour, when the daily rites of Jagannāth are over and the temple is shut up.

The following is a brief account of the chief *nitis* or ceremonies which make up the daily ritual.* The rules regulating these ceremonies are contained in three sacred books, the Nīḷādri Mohodaya, the Kshetra Māhātmya and the Smritis of Gadādhar Paddhati. It is of great importance that they should be punctually observed, as on it depends the safety of the large crowds of pilgrims who flock into the temple. Besides the *nitis*, there are what are known as *sāhāna melās*, *i.e.*, audiences granted to the worshippers during the leisure moments of the deities. The term is apparently a corruption of *sādhārana melā*, meaning open to the public, and implies that the general public have access to the innermost shrines. A *sāhāna melā* may take place at any time, but is at present held after the *niti*, called *abakāsha*, described below.

The first *niti*, which is known as *dwārfitā*, consists of opening the doors of the different shrines. An officer, called the Bhitarchhu Mahāpātra, arrives at the Lion Gate at about 5 A.M., challenges the sentry there, and passes into the inner courtyard where he is joined by four other temple servants. This party examines the seals on the doors of the different shrines, and if they are intact, they are broken, the padlocks unlocked and the doors opened. The object of this inspection is to see that there has been no defilement of the sacred buildings, in which case a purifying ceremony, called *mahāsnāna*, is necessary. Before opening the door of the Holy of Holies, a hymn is chanted to the gods within, warning them to leave their couches and go to the throne, as the sun from his eastern chambers is even now shooting forth his rays. This done, the door is opened, the priests enter the shrine, and the couches are removed one by one to the store-room. Meanwhile, before the Jaya Bijaya door, a crowd of eager worshippers is struggling, pushing and hustling one another for the foremost place, so as to be first to rush down the steps into the next sanctuary as soon as the second ceremony of the day is over.

This ceremony, which is known as *mangala ārati*, consists of lighting camphor in silver salvers, and waving blazing torches before the gods. It is followed by *pithā ārati*, *i.e.*, the offering

* This account of the *nitis* and festivals has been prepared from a note by Mr. A. Garrett, I.C.S., formerly Collector of Purī, and from information supplied by Bābu Rāj Kishor Dās, Manager of the Jagannāth Temple.

of *pithā*, a cake or paste made of rice, flour and water; in this a greased wick is placed, lighted, and waved before the gods. A gong now sounds, and the Jaya Bijaya door is opened. By the light of the torches, the worshippers scan the features of the gods, and then arises the cry, "Take pity on me, O God, and free me from all my woe." While *pithā ārati* is being performed, the cry ceases, and in silence the crowd await permission to enter. The Pashupālaks next mount the throne, and take off the flower garlands from the images.

Next come *abakāsha* and *besha*, *i.e.*, the bathing and dressing of the gods. The bathing is performed vicariously by their sacred attendants, who sit in front of the gods' throne, pretend to clean their teeth in front of the round brass plates in which the images are reflected, rinse their mouths, and pour water into brass tubs. The Pashupālaks then dress the gods and rub them with camphor. After this, *sāhāna melā* takes place, *i.e.*, the public are permitted to see the gods, and their offerings (*pindikas*) are collected. These rites are followed by *ballabha* or early breakfast, *i.e.*, rice, which has been dried in the sun, fried and covered with sugar and *ghī*, is placed before the images. The *pandās* who officiate at this ceremony next go to the temple kitchen and perform the *homa* ceremony, *ghī* and coconuts being burnt and sanctified; and this is followed by *Sūrya pūjā* or an offering to the sun-god, which consists of boiling some rice in the sun.

The next important *niti* is *sakāladhūpa*, at which Jagannāth is supposed to enjoy his breakfast. It consists of rice, vegetables, cakes, etc., which are offered at about 10 A.M. Meanwhile, the imaginary repast is enlivened by a girl dancing an antiquated measure to the sound of a drum. The offering of betel-nut (*biriālāgi*) and the changing of the gods' clothes (*mailam*) succeed this as all the other meals of the day. The next important ceremony is the midday meal known as *madhyānna dhūpa* or *duiprahara dhūpa*, after which the gods enjoy a siesta (*dinapahar*) between 1 and 2 P.M., the cots being taken from the store-room and placed in front of them.

In the evening *sandhyā ārati* is performed in the same manner as *mangala ārati*; and the next *niti* is *sandhyā dhūpa* or the evening meal between 8 and 9 P.M. Then at about 10 P.M. *chandanalāgi* takes place. Three large silver cups containing essence of sandal wood are brought, and the Pashupālaks, standing on the throne, apply the contents to the bodies of the gods. The pilgrims are now allowed *sāhāna melā* for about two hours, *i.e.*, are admitted to the inner temple. At midnight the

gods are given nose ornaments composed of sweet-scented flowers, and are garlanded from head to foot, this *niti* being called *bara singāra besha*. After this, the final *bhoga*, known as *bara singāri bhoga*, is offered, followed by music and singing, and the gods are then put to bed. Their couches are brought in from the store-room and put in front of the throne; three unripe coconuts with holes bored in them being placed close by with some betel-nut and flowers. Then the door is closed for the night by the Baradwār Parihāri, who fastens a padlock to the chains; a little mud is put on the lock, and the stamp of Madan Mohan (a representation of Jagannāth) is impressed on it. This is known as *muda*. The gods are then left to their slumbers.

There are altogether 62 festivals in the year, but the following are the chief festivals of general or local interest arranged according to the months of the year. FESTIVALS.

Pausa (December-January).—Three festivals are held in this month. The Navānna Jātrā is held on the last day of the month; the pilgrims walk nine times round the inner temple, and pudding and rice-meal cakes are consumed. Pusyābhisheka is a local holiday occurring on the full-moon day of the month, when Jagannāth is clothed in his finest robes. The third festival, which lasts the whole month, is called Dhanu Sankrānti Pratham Bhoga; a special *bhoga* consisting of cakes made of various pulses is offered to Jagannāth.

Māgha (January-February).—The Makara Sankrānti or Makar Jātrā takes place on the 1st day of Māgha or Makara, and is attended by a large crowd of pilgrims on their way from Sāgar Island. The Srī Panchamī or Basantotshava, a festival in honour of the spring, is also held in this month. Jagannāth is dressed in gorgeous clothing, and golden fingers and feet are attached to his image.

Phālguna (February-March).—The Dola Jātrā is held in honour of the spring. On this occasion the image of Madan Mohan is brought to the *dola-bedi* or swinging platform outside the north-eastern corner of the temple. The festival is at its height on the full-moon day, Dola Pūrnimā. The day before this is known as Mendhā-pūdi and the day after it as Dhulandi; on the latter day there is general merrymaking, which finds expression in squirting red powder through syringes.

Baisākha (April-May).—The chief festival is the Chandana Jātrā, which lasts for 21 days. On this occasion Madan Mohan comes forth from the temple every day and is escorted in procession to the Narendra tank; the idol is then placed on a boat and carried round the tank with music and dancing.

Jyaishtha (May-June).—This month witnesses a local festival, called the Narsingha Janama, at which Jagannāth is covered over with flowers, and appears with a lion's face made of sola; or rather a large piece of sola with pieces of cotton stuck on it is put in front of Jagannāth's face, with a huge slit in it to represent a mouth. It commemorates the appearance of Jagannāth as a man-lion to kill the *asura* or demon, Hiranyakasipu, who was oppressing the gods.

Ashādha (June-July).—The Snāna Jātrā or bathing ceremony in Jyaishtha ushers in the great festival of the year, the Rath Jātrā, which occurs 17 days later. On the Snāna Jātrā day, *i.e.*, the full moon of Jyaishtha, the images of Jagannāth, Balabhadra and Subhadrā are taken out of the sanctuary and placed on a lofty platform near the outer wall, where they can be seen from the street below. Here they are bathed with 108 pitchers containing water taken from a well near the northern gateway, which is used only once in the year. In consequence, the paint is so much damaged that they have to be removed to a side room in order to be renovated for the Car Festival, when they next make their public appearance. They are placed behind a screen, in front of which are hung three painted scrolls that represent the gods for the time being. None are allowed to go behind the screen except the Daitās, whose duty it is to renovate the images. This period is called *anabasara* (literally, not at leisure).

The process of renovation and decoration is usually completed two or three days before the Car Festival, when the gods are again fit to be seen. This occasion is celebrated as the Nabayauvana, literally fresh youth, and is eagerly looked forward to by the crowd that have been assembling from the time of the Snāna Jātrā. On the first day of the Nabayauvana, *sāhāna melā* is allowed for the first time since the Snāna Jātrā; on the second day the finishing touches are given to the eyes of the gods by the Daitās, the ceremony being called Netrotshava. On the third day, known as Srī Gundichā day, the gods are brought out and put on the cars by the Daitās. The Rath festival now commences, and ends when the gods return to their shrine, this being known as *bāhudā*. The crowds of pilgrims who have begun to collect during the Snāna Jātrā begin to disperse directly Jagannāth's car has been pulled a few yards. New pilgrims also continue to come throughout the festival, as they do not seem to care at what stage they see it, or to attach importance to the *pahandi*, or installation of the idols on the cars. A more detailed account of the Rath Jātrā will be given later.

Srāvana (July-August).—The Jhulana Jātrā is held from the 11th day of the month to the full-moon day. A swing is erected on the platform between the Mukti Mandapa and the Jagamohana, on which Jagannāth is represented by Madan Mohan. The festival is celebrated with greater pomp in the *maths*, specially the Gangāmātā.

Bhādra (August-September).—The Krishna Janama or festival in honour of the birth of Krishna is held in this month. An extra *bhoga* is offered before the image of Krishna during the night, and next day the image is exposed to public view in a swinging cradle. Kālīya-damana Besha is another local festival held in this month. Jagannāth is dressed with great splendour, and a snake is placed in front of his image to commemorate his victory, in the waters of the Jamunā, over the snake that troubled his friends, the Gopīs.

Aswin (September-October).—An important festival is held in Aswin, viz., the Dasaharā, which commemorates the conquest of Southern India by Rāmachandra, the husband of Sītā.

Kārttika (October-November).—The Rāsa Pūrnimā, also known as the Panchaka festival, is held during the last five days before the full moon. Large numbers of visitors come to Purī from different parts of Orissa to join in it.

Nuā kalebara. A special festival is that known as the *Nuā kalebara* (literally the new body) which takes its name from the fact that, on the occasion of its celebration, the *nīm*-wood bodies of Jagannāth, Subhadrā and Balabhadra are renewed. Its celebration is said to depend on certain astronomical conditions, viz., the occurrence of two months of Ashādha in the same year, *i.e.*, when there is an intercalary month owing to the lunar month of Ashādha not coinciding with the solar month. This accounts for the rarity of the festival. Within the last 60 years it has been celebrated in 1853 and in 1877. It was expected again in 1893, but was not celebrated, according to one account, because of a popular tradition that the carpenter, a Brāhman priest and one of the Rājā's household would die within the year. There should also have been a *kalebara* in 1900 according to the Bengali calendar, but not according to the Oriyā almanacs, and the latter were followed. The popular belief is that the festival depends on the durability of the wood of which the images are made. If the festival takes place at an interval of one *yuga* (12 years) or more, the images are entirely renewed, and the old ones buried in great secrecy; but if there is a smaller interval of time, only a partial renovation is necessary.

CAR FESTIVAL. Of all the festivals of the year the greatest is the Rath Jātrā or Car Festival, which commemorates the journey of Krishna from Gokul to Mathurā. According to Hindu mythology, Krishna, the ninth incarnation of Vishnu, was the eighth son of Basudeva and his wife Devakī. It had been predicted that a son of theirs would kill Kansa, the demon king of Mathurā, who typifies the principle of evil. Kansa, therefore, imprisoned Basudeva and his wife, and slew their first six sons; Balarāma, the seventh, was abstracted from Devakī's womb, transferred to that of Rohinī, another wife of Basudeva, and so saved. On the birth of Krishna, the father escaped from Mathurā with the child and, crossing the Jamunā, entrusted the infant Krishna to the care of the herdsman king, Nanda of Vraja. In Gokul or Vraja Krishna grew up to manhood. At length, Kansa heard of him and sent a messenger to bring him and his brother to Mathurā. The brothers drove in their chariot victoriously to Mathurā, where Krishna killed Kansa and ruled in his stead.

This episode in the life of Krishna is commemorated by the Rath Jātrā, which takes place in June or July every year. On this occasion the images of Jagannāth, Balabhadra and Subhadrā are removed from the temple and taken in great chariots to the garden house (Gundichā-bāri) along the Bara Dānda road, which is about a mile and a half long. Here the gods remain in the car at night, and are taken out next morning and placed in the shrine. They remain there for a week and are then again put into the cars and taken back to the temple, thus commemorating the return journey of Krishna. The rule is that the whole festival should last 9 days, allowing a day for the journey to the Gundichā-bāri, a day for the return journey, and 7 days for the stay there; but in practice it lasts much longer, the return journey sometimes taking many days.

The cars are large structures of considerable height, resembling lofty towers, bedecked with tinsel, paintings and wooden statuary. The largest is the car of Jagannāth, which is 45 feet in height and 35 feet square, and is supported on 16 wheels with a diameter of 7 feet. The brother and sister of Jagannāth have separate cars a few feet smaller. The images are brought out from the temple through the Lion Gate and placed on the cars, this being known as the *pahandi*, a sacred moment when the assembled pilgrims fall on their knees and bow their foreheads in the dust. They then seize the ropes, and drag the cars down the Bara Dānda road to the garden house of Jagannāth. The distance is only about 1½ mile, but as the heavy structures have no contrivance to guide them, and the wheels sink deep into

the sand, which in some places covers the road, the journey has been known to take several days. Once arrived at the garden house, the enthusiasm subsides. By the third day most of the pilgrims have left, and but for professional car-pullers, Jagannāth would often be left there. The cars are dragged from the temple by the assembled pilgrims and by a number of villagers, who hold revenue-free lands granted to them as remuneration for the work; when the pilgrims are insufficient to drag the cars back, coolies are engaged from the neighbouring villages. In 1904, the pilgrims alone pulled the cars to the country house in 4 hours and brought them back again to the temple without such assistance; in 1907, when 75,000 pilgrims attended the ceremony, the journey was performed in 4½ hours.

No crowd is more amenable than that which gathers during the Rath Jātrā, but a very large proportion consists of women; and this constitutes a danger, as their eagerness to press forward and see Jagannāth is very great, and if one falls down, a fatal accident may easily occur. The greatest care is taken to prevent accidents, but this is not always an easy task, for the more zealous devotees rush in front of the cars, especially that containing Jagannāth, before which they prostrate themselves with the object of touching it and so obtaining merit. This is not unnatural, for it is believed that he who obtains a sight of Jagannāth at this time is saved from the misery of future rebirths. The accidents which have occurred in this way have given rise to the belief that self-immolation is practised at the festival.

Early European writers unanimously gave voice to this belief. Bruton, the first Englishman to visit Purī (1633), wrote in his description of the temple:—"Unto this Pagod or house of Sathen doe belong 9,000 Brammines or Priests, which doe dayly offer sacrifice unto their great God Jaggarnat, from which Idoll the City is so called. And when it (the chariot of Jaggarnat) is going along the city, there are many that will offer themselves a sacrifice to this Idoll, and desyerately lye downe on the ground, that the Chariott wheeles may runne over them, whereby they are killed outright; some get broken armes, some broken legges, so that many of them are destroyed, and by this means they thinke to merit Heaven."

Bernier also wrote (1667):—"In the town of Jagannat, situated on the Gulf of Bengale, and containing the famous temple of the idol of that name, a certain annual festival is held, which continues, if my memory fail not, for the space of eight or nine da s. At this festival is collected an incredible concourse of

people. The number, I am told, sometimes exceeds one hundred and fifty thousand. A superb wooden machine is constructed, such as I have seen in several other parts of the Indies, with I know not how many grotesque figures. This machine is set on fourteen or sixteen wheels like those of a gun-carriage, and drawn or pushed along by the united exertions of fifty or sixty persons. The idol, Jagannat, placed conspicuously in the middle, richly attired, and gorgeously adorned, is thus conveyed from one temple to another. The first day on which this idol is formally exhibited in the temple, the crowd is so immense, and the press so violent, that some of the pilgrims, fatigued and worn out in consequence of their long journey, are squeezed to death: the surrounding throng give them a thousand benedictions, and consider them highly favoured to die on such a holy occasion after travelling so great a distance. And while the chariot of hellish triumph pursues its solemn march, persons are found (it is no fiction which I recount) so blindly credulous and so full of wild notions as to throw themselves upon the ground in the way of its ponderous wheels, which pass over and crush to atoms the bodies of the wretched fanatics without exciting the horror or surprise of the spectators. No deed, according to their estimation, is so heroic or meritorious as this self-devotion: the victims believe that Jagannat will receive them as children, and recall them to life in a state of happiness and dignity."

Alexander Hamilton, writing in 1727, gave a similar account. "Jagarynat's effigy is carried abroad in procession, mounted on a coach four stories high. They fasten small ropes to the cable, two or three fathoms long, so that upwards of 2,000 people have room enough to draw the coach, and some old zealots, as it passes through the street, fall flat on the ground, to have the honour to be crushed to pieces by the coach wheels."

These travellers' tales began to be discredited when there were actually British residents at Purī. As early as 1818 Stirling wrote:—"That excess of fanaticism which formerly prompted the pilgrims to court death by throwing themselves in crowds under the wheels of the car of Jagannāth has happily long ceased to actuate the worshippers of the present day. During four years that I have witnessed the ceremony, three ca only of this revolting species of immolation have occurred, of which I may observe is doubtful, and should probably ascribed to accident; in the other the victims had long suffering from some excruciating complaints, and chose method of ridding themselves of the burthen of life in prefe to other modes of suicide so prevalent with the lower orders

similar circumstances." Mr. Fergusson, who visited Purī in 1838, saw "the pilgrims hurrying to the spot talking and laughing, like people going to a fair in England, which in fact it is;" but he saw no victims crushed under the wheels, and none had been heard of for many years before.

This fallacy was finally exposed by Sir William Hunter, who carefully examined the whole evidence on the subject, from 1580, when Abul Fazl wrote, through a long series of travellers, down to the police reports of 1870, and came to the conclusion that the deaths at the Car Festival were almost always accidental. "In a closely-packed, eager throng of a hundred thousand men and women, many of them unaccustomed to exposure or hard labour, and all of them tugging and straining to the utmost under the blazing tropical sun, deaths must occasionally occur. There have, doubtless, been instances of pilgrims throwing themselves under the wheels in a frenzy of religious excitement; but such instances have always been rare, and are now unknown. At one time, several unhappy people were killed or injured every year, but they were almost invariably cases of accidental trampling. The few suicides that did occur were for the most part cases of diseased and miserable objects, who took this means to put themselves out of pain. The official returns now place this beyond doubt.

"Nothing, indeed, could be more opposed to the spirit of Vishnu worship than self-immolation. Accidental deaths within the temple renders the whole place unclean. The ritual suddenly stops, and the polluted offerings are hurried away from the sight of the offended god. According to Chaitanya, the apostle of Jagannāth, the destruction of the least of God's creatures is a sin against the Creator. Self-immolation he would have regarded with horror. The copious religious literature of his sect frequently describes the Car Festival, but makes no mention of self-sacrifice, nor does it contain any passage that could be twisted into a sanction for it. Abul Fazl, the keen Musalmān observer, is equally silent, although from the context it is almost certain that, had he heard of the practice, he would have mentioned it."

For the due observance of the daily ritual and the celebration of the festivals there is an elaborate organization of *sebāits*, *i.e.*, the priests, attendants and servants of Jagannāth. They are divided into thirty-six orders, known as *chhattisā niyoga*, under a head officer called the *nāyaka*; but they may be broadly grouped under two heads:—(1) the guards of the temple, such as Brāhman Parihāris (Sans. *Pratihāri*) and Gochhikārs, and non-Brāhmans (*e.g.*, Dwāris, Lenkās, Paiks, etc.); and (2) the Pandās (Beng. TEMPLE STAFF.

Pāndā) or priests of the god. Both Parihāris and Pandās are regarded with the greatest reverence by the pilgrims, so much so that if they are struck by their canes, they regard it as a sign of the grace of God and believe that their sins are washed away. Of the other orders, the most noticeable are the Suārs (Sans. *Sūpakāra*) or cooks, the Mekāps in charge of the wardrobe, and the Badus, who assist in the worship by handling water-pots, brass vessels, lamps, etc., the Khuntiās, who call the priests and distribute the sacrificial flowers, the musical players, and the dancing girls or Devadāsīs.

Daitās. Ordinarily, only two orders of priests can touch the images of the gods, viz., the Pashupālaks and the Pūjā Pandās; but this rule is relaxed during the Car Festival and the Snāna Jātrā or bathing festival, when the services of all classes of priests are required to carry the images to and from the Snānavedi and the cars. During these two festivals the Daitās are supposed to be specially in charge of the persons of the gods, but they have to go away before any *bhoga* can be offered or any rite performed. It has been suggested that the position of the Daitās points to a compromise between Brāhmanism and the older religion, whatever it was. According to tradition, the Daitās are the descendants of the fowler Viswābasu, and possess the privilege of touching the body of Jagannāth in virtue of their descent. This tradition, their claims to be the guardians of the god, their present duties and habits, all point to the fact that they are the descendants of the old people who worshipped the god, whom the Brāhmans absorbed in their system.

Dancing girls. Another class about whose position there has been some misconception is that of the dancing girls. For example, Sir William Hunter writes :—"Indecent ceremonies disgrace the ritual, and dancing girls with rolling eyes put the modest female worshipper to the blush" . . . "The baser features of a worship which aims at a sensuous realization of God appears in a band of prostitutes who sing before the image" . . . "In the Pillared Hall a choir of dancing girls enliven the idol's repast by their airy gyrations" . . . "The indecent rites which have crept into Vishnuvism are represented by the Birth Festival (*Janam*), in which a priest takes the part of the father and a dancing girl that of the mother of Jagannāth, and the ceremony of his nativity is performed to the life." It is reported that there is no indecency in any of the rites, and no dancing girl has part in the ritual. One girl, it is true, performs an antiquated dance to the accompaniment of a small drum during Jagannāth's morning meal (*sakāladhūpa*) ; but this is not regarded as an essential part of the ceremony, and her

absence does not interfere with its performance. Again, at night, when all the ceremonies are over, one of the dancing girls comes (after a bath whatever the hour may be) and sings a song in the presence of the deity. But, should any of the dancing girls enter the inner sanctuary except on these two occasions, the whole shrine is considered defiled and *mahāsnāna*, or a ceremony of purification, has to be performed before the rites can continue.

Another statement which may be corrected is that "As the pilgrims passes the Lion Gate, a man of the sweeper caste strikes them with his broom to purify them of their sins, and forces them to promise on pain of losing all the benefits of pilgrimage not to disclose the events of the journey and the secrets of the shrine." Sweepers as a class are prohibited from entering, no pilgrim is struck by their brooms, and no promise of secrecy is exacted.

Rājā of Purī. The temple, with its full establishment, is under the Rājā of Khurdā, now known generally as the Rājā of Purī, because he lives at Purī. The Rājā has to perform some nominal services in the temple, viz., sweeping the cars and strewing flowers over the idols during the Car Festival, but as he rarely comes out, this work is done by a proxy, the *Mudiratha*. Formerly the duties of superintendence vested in the Rājā were carried out by *Parichchhās* or inspectors, but under the system now in force the work of supervision is entrusted to the Manager, at present an Oriyā Deputy Magistrate.

The connection of the Rājā of Khurdā with the temple dates back to the time of Mān Singh, who in 1590 conquered Orissa, and selected the then Rājā of Khurdā, Rāmchandradeva, as Superintendent of the temple, probably because he was related to the Bhoi kings of Orissa. Rāmchandra's descendants continued to manage the temple till the 18th century, when the Musalmān Deputy Governors ousted the Rājā, levied a pilgrim tax, and generally interfered so much with the internal management of the temple, that the priests fled with the idols and kept them hid in a hill on the Chilkā lake. The loss of revenue which resulted forced the Deputy Governor to induce the priests to bring back the idols under a promise that the worship of Jagannāth would not be interfered with. When Alī Vardi Khān ceded Orissa to the Marāthās, the latter kept the management in their own hands, had the ceremonies and festivals properly conducted, and made good any deficits due to an excess of expenditure. On the conquest of Orissa in 1803, the British authorities managed the temple for the first few years, and then, desirous of withdrawing from the direct management of

a heathen temple, entrusted the superintendence to the Rājā of Khurdā, who had been released from imprisonment in 1807, and ordered him to live in Purī town. The subsequent history of the connection of the Rājā with the temple will be found in the section dealing with Administration at the end of this chapter.

ths.

No account of Jagannāth worship would be complete without some account of the *maths* in Purī. *Maths* are monastic houses originally founded with the object of feeding travellers, beggars and ascetics, of giving religious instruction to *chelās* or disciples, and generally of encouraging a religious life. The heads of these religious houses, who are called *Mahants* or *Math-dhāris*, are elected from among the *chelās*, and are assisted in the management of their properties by *Adhikāris*, who may be described as their business managers. They are generally celibates, but in certain *maths*, married men may hold the office. *Mahants* are the *gurus* or spiritual guides of many people, who present the *maths* with presents of money and endowments in land. Thus, the Srīrāmadāsa or Dakhinapārsva *math* received rich endowments from the Marāthās, its abbot having been the *guru* of the Marāthā Governor; while the *Mahant* of the Emār Math in the 18th century, who had the reputation of being a very holy ascetic, similarly got large offerings from his followers. Both Saivà and Vaishnava *maths* exist in Purī. The lands of the latter are known as *amruta-manohi* (literally nectar-food), because they were given with the intention that the proceeds thereof should be spent in offering *bhoga* before Jagannāth, and that the *mahāprasād* thus obtained should be distributed among pilgrims, beggars and ascetics; they are distinct from the *amruta-manohi* lands of the temple itself, which are under the superintendence of the Rājā. In 1848, Bābu Brij Kishore Ghose roughly estimated the annual income of 29 *maths* from land alone at Rs. 1,45,400,* and this income must have increased largely during the last 60 years.

There are over 70 *maths* in Purī town. The chief Saiva *maths* are located in the sandy tract near Swarga-dwār, viz., Sankarā chārya, with a fine library of old manuscripts, and Sankarānanda, which has a branch at Bhubaneswar. Near the Saṅkarāchārya *math* is a small *math* of the Kabīrpanthis or followers of Kabīr and the Sikh Guru Nānak. Most of the *maths* are naturally Vaishnava. The richest of the latter are Emār, Srīrāmadāsa and Rāghavadāsa, the inmates of which are Rāmāts or followers of

* History of Pooree, pp. 8-9.

Rāmānanda. The Gauriyās or followers of Chaitanya have two *maths*, viz., Rādhākānta, with a celibate abbot, and Kothbhoga with a married abbot; while the Madhvāchāris have the Achāri *math* with a Telugu married abbot, and the local sub-sects have two Oriyā *maths*. The Uttarapārsva *math* is one of the oldest and most highly esteemed, being permitted to supply a special *bhoga* of Jagannāth, the *mohana-bhoga*. Another *math* with a fair income is located in the Jagannāth-vallabha garden, which is frequently mentioned in the biographies of Chaitanya.

PILGRIMAGE.

The Jagannāth pilgrimage appears to be at least eight centuries old, for in an inscription dating back to 1137 A. D. we find mention of a pilgrim who "went to the sacred Purushottam Kshetra and gave away his wealth in charity on the noisy shore of the sea."* Throughout these centuries the magnificence of the temple, with its elaborate ritual, the liberal royal patronage it enjoyed, the development of Vaishnavism, the catholicity of worship it inculcated, have combined in attracting attention to Jagannāth; and year after year a steady stream of pilgrims has flowed to the temple by the sea in spite of the great difficulties of the journey. Nothing, however, has stimulated pilgrimage so much as the organized system of pilgrim guides. The Pandās and Parihāris of the temple have divided among themselves the whole of India, each having their allotted circle, in which they claim to possess a monopoly of pilgrims. Two or three months before the beginning of the principal festivals, the Dola and Rath Jātrās, they engage agents, mostly Brāhmans and sometimes barbers and Gauras, and depute them to different parts of India in order to recruit pilgrims. These agents, who are often erroneously called Pandās, are known as *bātuās* (journeymen) in Oriyā and *sethos* in Bengali.

Pilgrim guides.

They travel among the chief towns and villages of their circle, carrying with them *nirmālya*, *i.e.*, rice half boiled and offered to Jagannāth, and *mahāprasād*, *i.e.*, fully boiled rice, sweetmeats, pulses, etc., which have been similarly placed before the god. This sacred food they offer to the townsfolk and villagers whom they visit, and at the same time persuasively appeal to their pious feelings and their longing for new sights by telling them—and especially the women and old men—of the miraculous power of the god, his great temple and holy service, of the wonderful sights to be seen on the way and at Purī itself, of the beatific visions to be enjoyed in the temple, and of the certain salvation to be obtained from a glimpse of the god.

* Monmohan Chakravarti, *The date of the Jagannāth Temple in Purī*, J.A.S.B., Part I, 1898.

Hurried consultations follow in the family and with the neighbours, and money is got together for the journey. A short time before the festival, the pilgrims leave home, on an auspicious day, under the guidance of the Pandā's agent, generally in a party of five to twenty persons. Females predominate, and among females, widows; instances are not wanting of young women running away from their homes and joining the little body of pilgrims.

The perils of the journey fifty years ago have been vividly described by Sir W. W. Hunter:—"The great spiritual army marched its hundreds, and sometimes its thousands of miles along burning roads, across unbridged rivers, and through pestilent regions of jungle and swamps. Those who kept to the road had spent their strength long before the holy city was reached. The sturdy women of Hindustān braved it out and sang songs till they dropped; but the weaker females of Bengal limped piteously along with bleeding feet in silence, broken only by deep sighs and an occasional sob. Many a sickly girl died upon the road; and by the time they reached Purī, the whole party had their feet bound up in rags, plastered with dirt and blood." At that time the Bengal pilgrims had to tramp all the way from Uluberiā to Purī on the Jagannāth Trunk Road, only the wealthier classes travelling in bullock carts or palanquins, while pilgrims from the south used to come by road along the strip of land between the Chilkā lake and the Bay, or in a few cases by boats across the Chilkā. During the last 30 years of the 19th century the difficulties of the journey were much decreased, as it was possible to go from Calcutta by sea-going steamers to Chāndbāli in the Balasore district, thence by river in barges towed by steam launches to Cuttack, and lastly by road to Purī. Now-a-days most pilgrims travel by rail direct to the sacred town.

The earliest known account of the pilgrimage in detail is recorded in the biographies of Chaitanya, such as the *Kadchā* of Govinda Dās, the *Chaitanya-bhāgavata*, and the *Chaitanya-Charitāmrita*. That great apostle of Vaishnavism first came to Purī early in 1510 A. D. During his pilgrimage through Orissa he visited the Saiva temple in Jaleswar, the shrines of Kshīrachora Gopīnātha at Remunā, of Varāhanātha and Birajā at Jājpur, of Sākshigopāla Gopīnātha at Cuttack (since removed to Satyabādī, 12 miles north of Purī) and the Lingarāj at Bhubaneswar. Modern pilgrims omit Jaleswar and Remunā, and only a few visit Jājpur and Satyabādī. Passing onwards through Cuttack, the next station reached is Bhubaneswar, which though inferior to Purī in religious sanctity surpasses it in its wealth of artistic and archæological

remains. Here the pilgrims bathe in the sacred tank of Vindusāgara, pay their respects to Bāsudeva on its east bank, visit the great temple of Lingarāj, and next circumambulate the other great temples in the neighbourhood, Siddheswar and Kedāreswar, Brahmeswar, Yameswar and Rāmeswar. The offerings of boiled rice at Lingarāj and Bāsudeva, it may be added, are considered nearly as sacred as the *mahāprasād* of Jagannāth in their power to obliterate caste distinction.

Pursuing their journey from Bhubaneswar, the weary pilgrims at last catch sight of the blue wheel topping the tower of the Jagannāth temple. Raising a loud shout of "*Jai Jagannāth ki jai*," they change their dress. Those who have come by road hurry on over the old bridge of 18 openings, the *Athāranālā* bridge, while those who alight at the railway station hurry on over the sand, all eager to arrive quickly at the Lion Gate. The pains and miseries of the journey are forgotten, when the devotees reverently enter inside and catch a glimpse of the idols seated in their full glory on the Ratnavedi. This first visit is known as *dhulo pāye darsan*, *i.e.*, "paying homage to the gods with the dust on the feet." The pilgrim guide now makes over his little flock to his employer. Those who have none are eagerly questioned by the priests or their servants, *khātās* are brought forward, and in most cases an ancestor or a relation is traced out as a client. The *khātās*, it may be explained, are the Pandās' books, in which the names of their pilgrims and their ancestors are entered. When no ancestor or relation can be traced, and the pilgrims hesitate to select a Pandā, there is often a brawl, and occasionally a fight, between the agents of the different priests. The priests then lodge the pilgrims in the licensed lodging-houses, arrange for a supply of daily food from the temple, and depute men to show them the sacred places.

The pilgrims naturally first visit the shrine of Jagannāth, Balabhadra and Subhadrā; and offer jewels, ornaments, money, cloths and other valuable articles at their throne. These become the property of the temple. Then they visit the other shrines within the enclosure, of which the most important are Bimalā (a form of Durgā), Lakshmī, Saraswatī and Sūrya. Barren women especially worship the Akshaya-bata (*Ficus Bengalensis*) and its presiding deity, Bata-Ganesha, in order that they may be blessed with offspring. Outside the temple, the principal sacred places visited by the pilgrims are (1) Gundichā-bāri, to which the three deities are driven in cars during the Car Festival; (2) the *pancha-tīrtha* or five sacred sites, viz., the stone-embanked tanks of Indradyumna, Mārkanda and Swet-Gangā

with temples rising from their edge, the Chakra-*tīrtha* and the Swargadwār or door of heaven, both on the sea side; and (3) the temple of Loknāth on the west, the water of which is so sacred that an oath taken by it is regarded by the people of Purī as more awful than an oath on the holy offerings of Jagannāth or any other deity. The Gauriyā Vaishnavas, the followers of the Chaitanya cult, also visit the *maths* hallowed by association with Chaitanya, viz., Rādhākānta, where he lived and where his cell and quilt are shown, Auliā, where his wooden shoes are kept, and Totā Gopīnāth near the sea shore, where he is said to have disappeared.

The pilgrims are enjoined to stop at Purī at least three nights, but most stop longer during the Rath and Dola festivals. During the former Bengalis predominate; during the latter, the proportion of up-country people is larger; and during the Panchaka or Rāsa festival, the local people prevail. Formerly the largest number came during the Car Festival, and next during the *Holi;* but now-a-days, on account of easy communication by rail, the number of pilgrims is more equally distributed over the whole year, and the crowd has also increased on other holidays, such as the Pūjā and Christmas holidays. Special occasions, such as the *Kalebara* or Gobind Dwādasī, which occur at rare intervals, attract enormous crowds numbering hundreds of thousands. Accurate statistics of the number of pilgrims who visit Purī every year are not available, but a very fair idea of their number may be gathered from the figures showing the number of passengers booked by railway every year, viz., 300,000 in 1901, the same number in 1902, 281,000 in 1903, 331,000 in 1904 and 245,000 in 1905; over a half of these came from places 100 miles distant. The greatest rush is at the time of the Rath Jātrā. In 1907 this festival was attended by 70,000 persons, while it is on record that in 1892 there was an influx of over 200,000 pilgrims, this large crowd being attracted by the fact that the year was considered an highly auspicious one, and that it was intended to renew the images (*nuā kalebara*)—an intention which was subsequently given up, or even more would have flocked to the sacred city.

The pilgrims include Bengalis, Oriyās, Gujarātis, Mārwāris, Punjābis, Marāthās and Telugus, and the majority are people of the poorer classes, such as indigent widows, religious mendicants, and needy peasants. A very large proportion are widows, who make great sacrifices to undertake the pilgrimage; instances are known of poor widows saving a little month after month

for years together, by foregoing some of the necessities of life, until they have enough for the expenses of the journey and of the offerings required. The difficulties of housing and feeding these multitudes can easily be imagined. The lodging-houses only provide accommodation for 20,000 pilgrims, and many have to camp out in the open, so that in the dry weather the place looks like a great encampment. Unfortunately the Car Festival, the great ceremony of the year, takes place in the rainy weather, and at this time the pilgrims who cannot find room in the lodging-houses or shelter elsewhere are exposed to the inclemency of the season. Conditions have now improved owing to the opening of the railway, the increase in the number of licensed lodging-houses, the improved sanitation of the town, and the greater facilities afforded for getting non-rice food. Pilgrims also observe less rigidly the custom of not cooking their food, exceptions being made in the case of the sick and the young. With all these changes for the better, however, Purī town and district still form a focus of cholera.

Inside the temple the greatest rush takes place on the *nava-yauvana* day, when the images, repainted and fully dressed, after 15 days' rest, are brought out for public view. The pilgrims who had been eagerly waiting for this day crowd inside to see the gods, and special arrangements have to be made by the temple authorities to prevent accidents. The pilgrims are allowed to enter the temple in batches by the north door of the Jagamohana, taken by a tortuous way to the sandal-wood barrier in the Mukh-siāli, allowed a minute or two to have a look at the idols, and then hurried out through the south gate of the Jagamohana. The services of the Pandās are of much value at this time, their men forming a cordon round the pilgrims by interlocking hands, and then slowly taking them by the tortuous passage inside, thus bearing on themselves the full brunt of the crush. Nevertheless, the frantic struggles of men and women, many old and sick, are often a pitiable sight, and several swoon away in the heat and the crush.

Pandās' income.

The Pandās have frequently been charged, and in many cases not without reason, with fleecing their pilgrims; but it is undeniable that they labour hard to secure the personal comfort of the latter, and to show them the *tīrthas* and have the due ceremonies performed with the least inconvenience possible. Apart from small commissions on the purchase of *mahāprasād* and knick-knacks, the chief income of these spiritual guides is obtained when the ceremony called *ātikā-bandhā* is performed. This takes

place in a building known as Vaikuntha, situated outside the inner enclosure to the north of the temple. Here moral pressure is put on the pilgrims to pay a round sum for periodical *bhogas* of food to be distributed among Brāhmans, beggars and ascetics. Sums varying from Rs. 5 to Rs. 1,000 are realized in this way from each head of the family, and are appropriated by the priests. In case the pilgrim has no ready cash in hand, he executes a note of hand to pay the balance on reaching home; and these debts are almost always repaid. Big landholders and Rājās also grant the Pandās endowments of land and even entire villages. But the Pandās, though often well paid, quickly spend the money, partly in spendthrift habits, partly in employing men for recruiting pilgrims. Most pilgrims are able to pay their Pandās for the services rendered by them, including accommodation in the lodging-houses; but numbers are in a state of destitution before the time comes for them to turn their backs upon the holy city and set their faces once more homewards. Since 1902 there has been a fund for the relief of destitute pilgrims, the object of which is to furnish them with sufficient money for travelling and diet, and thus enable them to return to their homes in safety.

Bhoga and *mahāprasād.*

Bhoga (Sans. *bhunja*, to eat) means food sanctified by being offered to a god, while food made holy by presentation to Jagannāth goes under the name of *mahāprasād*. The latter term properly means any food offered to Jagannāth, whether cooked or uncooked, rice or other food, but popularly it is used only for cooked rice, pulses, vegetables, tamarind, preparations of the same, and sweetmeats, but not for edible fruit. The *bhogas* are of two kinds, the *kothbhoga* or offerings made from the temple funds and the Rājā's house, and *chhattrabhoga*, or offerings made by *maths* or private persons. About half of the *kothbhoga mahāprasād* is given as remuneration to the officiating priests, and the rest is sold, the sale proceeds being credited to the account of the Rājā of Purī. It is reported by the Manager that the whole of the *kothbhoga* is regarded as part of the Rājā's perquisites, from which he allows a portion to the priests. The food is cooked in the temple kitchens (*rosa-ghara*) by the Suārs, and is thence removed by a covered passage to the inner sanctuary in the case of ordinary *kothbhogas*, and to the Bhogamandapa in the case of larger *kothbhogas* and *chhatrabhogas*. When the food is being presented to the gods, the priests on duty utter *mantras*, fans and fly-flaps (*chāmars*) are waved, and music is played. Except the Suārs and the priests, none can touch the pots; otherwise they become unfit for presentation before the

god and have to be thrown away. But on the completion of worship, the food becomes *mahāprasād*, and then can be touched by anybody and offered even by men of low caste to Brāhmans and others of high caste. The *mahāprasād* thus prepared (minus the quantity retained by the Rājā and the priests on duty) is offered for sale at Sarghara, a place outside the inner enclosure on the way to the Snānavedi. Here the pilgrims or their Pandās' employés buy and take the pots to the lodging-houses. The cooking is generally well done ; but if kept for more than a day, as is usually the case during the Car Festival, the food putrefies and becomes unfit for consumption.

The eating of *mahāprasād* or the holy food is perhaps the most distinctive feature of a pilgrimage to Purī. In the presence of Jagannāth all men, whether priest, noble or peasant, are regarded as equal, and the sign of this equality is that all may join together in eating the *mahāprasād*. Popular belief, indeed, has it that, if a low caste man offers it to one of a higher caste, and the latter turns away his head in contemptuous refusal, his neck becomes rigid and his head remains in that position. Another legend is that a proud pilgrim from Northern India once swore that he would eat the leavings of no mortal or immortal being. But as he crossed the bridge outside the sacred city, his arms and legs fell off, and there he lay on the roadside for two months, till a dog came out of the town eating a fragment of the holy food, and dropped some as he passed. The proud man crawled forward on his stomach, and ate the leavings, all slavered from the jaws of the unclean animal. Thereupon, the mercy of Jagannāth visited him; new limbs were given to him, and he entered the holy city as a humble disciple. It should be added, however, that the doctrine of equality of all men in the sacrament of the holy food is not always realized in practice, as a high caste man will sometimes take care to avoid the chance of being offered rice touched by a man of low caste.

The *mahāprasād* is unfortunately a fruitful source of disease. No pious pilgrims in good health would dream of cooking their food at Purī, and they eat the holy rice in whatever state it may be, for every grain is holy. It is too sacred for the least fragment to be thrown away, and the result is that large quantities are eaten in a state dangerous even to a man in robust health, while some is taken away to the pilgrims' homes and there distributed among their relatives. The state of boiled rice kept for such a long time can be better imagined than described, but its effects are sufficiently apparent from the number of deaths caused by cholera and bowel complaints.

ADMINISTRATION.

Under the Muhammadan rule 9 lakhs of rupees are said to have been realized by Government from the tax levied on pilgrims coming to Jagannāth.* The Marāthās, being Hindus, encouraged the worship and sanctioned regular payments for the support of the temple. In spite of this, their misrule must have greatly diminished the number of pilgrims. The Marāthā officials levied oppressive dues along the route; at each ford and pass the unhappy pilgrims had to pay toll; and every myrmidon extorted all that he could. The Jagannāth road was a mere foot-path, marked by the dead bodies of victims of cholera; and in 1806 the Revd. Claudius Buchanan describes the neighbourhood of Jagannāth as "a valley of skulls," and tells us that tigers roared every night near the outskirts and made havoc of the unhappy pilgrims, whose bones strewed the highways.

When the British marched to occupy the Province in 1803, Lord Wellesley expressly enjoined the troops to respect the temple and the religious prejudices of the Brāhmans and pilgrims; and a deputation of Brāhmans accordingly came into the camp, and placed the temple under their protection without a blow being struck. For the first few years the East India Company followed the same system as the Marāthās, who had annually made up the difference between the receipts and the expenditure of the temple. The result was that there was a deficit every year, which the Company had to make good. In 1806 the Government endeavoured to get rid of the minute supervision of idolatrous rites which this system involved, and by Regulation IV of 1806 the superintendence of the temple was vested in an assembly of three *pandits* nominated by the Collector of the Pilgrims' Tax and appointed by Government. By Regulation IV of 1809 the assembly of *pandits* was abolished, and the management was transferred to the Rājā of Khurdā (now known as the Rājā of Purī), who was appointed hereditary Superintendent. He was not granted, however, supreme authority; for in order to prevent any abuse of power on his part, three of the principal servants of the temple were appointed to assist him. They were not to be removed from their office except with the sanction of Government, and were required to report to Government any cases in which the Rājā issued orders inconsistent with the recorded rules and institutions of the temple. The Rājā received a fixed allowance on the understanding that the sum allotted was to be spent wholly in the maintenance of the temple.

* *Riyazu-s-Salātin*, Bibl. Ind. Ed. transl., p. 303.

Government reimbursed itself by a pilgrim tax similar to that which had been levied by the native governments, but of a much lighter character. This tax formed an important item in our revenue from Orissa; but it was felt that the money received was to a certain extent the price of a State sanction to idolatry. Accordingly, in 1840 the Company abolished the pilgrim tax, gave up all connection with the temple, and by Act X of that year vested the Rājā with full and absolute authority in regard to the management of the temple and its property. No provision, however, was made for his removal from the office of Superintendent of the temple on account of misconduct, or for carrying on his duties in the event of his being incapacitated. Act X of 1840 marked a new and important departure in the policy of Government. It not only repealed the pilgrim tax, but also forbade the temple authorities to impose taxes of any kind upon the pilgrims for admission into the temple and performing ceremonies there. The right of free admission and free worship thus became a recognized privilege of the general body of pilgrims.

At the same time, Government scrupulously maintained the pledges on the strength of which the temple had been placed under our protection by the priests. It declined to interfere with its ancient grants, and continued to make an annual payment to meet the expenses of the temple, which are said to have averaged Rs. 53,000 per annum. In 1843, the estate of Satais Hazāri Mahāl, yielding an annual rental of Rs. 17,420, was made over to the Rājā, and the annual money payment made by Government was thenceforth reduced to Rs. 35,738. In 1845, it was ascertained that out of this sum Rs. 23,321 represented partly certain assignments of revenue granted by the former Rājās of Berār, and partly certain dues (called *sair*) formerly collected on behalf of the temple, on account of which compensation was due; and it was therefore decided that the annual payment should be reduced to Rs. 23,321, being the amount of the resumed endowment and compensation for the *sair* referred to.

In 1856, owing to the neglect of the Superintendent of the temple, it was found necessary, for the protection of the pilgrims, to appoint a police establishment at an annual expense of Rs. 6,804, which was accordingly deducted from the annual payment made by Government. In 1858 the Government decided to make no more of these payments, but to transfer to the temple certain lands yielding an income of Rs. 16,517, the sum then being paid by it. Subsequently, it was decided, in 1859, that in future the Superintendent should be held responsible for

the preservation of peace inside the temple, that he should himself maintain such extra police as might be necessary outside the temple on the occasion of the great festivals, and that the sum of Rs. 6,804 hitherto paid direct to the police should be made over to the Superintendent, until a transfer of land yielding an equivalent sum could be effected. The Superintendent, for his part, executed an agreement, by which he bound himself to maintain a body of *barkandāzes* to assist in preserving order outside the temple during the Car Festival, and to keep up barriers at the temple gates to prevent a rush of pilgrims.

In 1859 the Rājā of Khurdā died, and his widow was empowered by his will to conduct the affairs of the temple during the minority of his adopted heir. The management of the temple went from bad to worse, nor was there any improvement when the Rājā came of age. Matters came to a crisis in 1878, when the Rājā was tried for murder, convicted, and sentenced to transportation for life. This sentence brought about a very anomalous state of things, inasmuch as, under Act X of 1840, the superintendence of the temple remained with the Rājā even after his transportation. Eventually, in 1885, Government instituted a suit under Act XIV of 1882 (one section of which had repealed the provision in Act X of 1840 vesting the Rājā of Purī with the superintendence) for the purpose of declaring vacant the office of Superintendent, which was nominally held by the convict Rājā, and of obtaining a decree to appoint new trustees under the trust and to settle a scheme for its management. This suit was hotly contested; the cry that religion was in danger was raised in the vernacular press; and in the end the case was abandoned in 1888 under a deed of compromise. This deed stipulated that during the minority of the young Rājā, Mukunda Deva, his grandmother and guardian should exercise on his behalf the rights of superintendence over the temple till he came of age; and that she should appoint a competent Manager to manage the affairs of the temple during his minority. This arrangement continued till 1897, when the Rājā having attained his majority, the decree ceased to have any force. Complaints of negligence and mismanagement continued even after the Rājā came of age, and eventually a Deputy Magistrate was appointed as Manager, with his consent, in 1902.

Police. One other point calls for special mention in connection with the temple administration, viz., the preservation of peace and maintenance of order in the shrine and its precincts—a matter of considerable importance, as the records shew that without proper police arrangements many pilgrims may be crushed to death

at the great festivals. It is probable that the Parihāris or hereditary temple guards were originally charged with the maintenance of order within the temple; but in 1855 we find a body of *barkandāzes* working apparently under the orders of the Superintendent. In consequence of several accidents which had taken place, this force was reorganized and augmented in 1856, under the direct control of the Magistrate, at an annual cost of Rs. 6,804, which was deducted from the sum paid by Government annually to the Superintendent. This arrangement remained in force till 1859, when the responsibility for keeping up an adequate force of guards inside the temple, and for supplying extra police outside it during the great festivals, was entrusted to the Superintendent, who received an assignment of land yielding a yearly income of Rs. 6,804, to defray the expenses thereby incurred. Beyond occasional help, the arrangements for policing the interior of the temple remained in his charge till 1901, when a body of regular police was posted within it, at the Superintendent's expense, in consequence of some serious accidents which had occurred. This force has been withdrawn since the appointment of a Manager, the task of controlling the crowds of pilgrims inside the temple being left to the temple staff. Under the present system, Government supplies the police stationed at the gates of the temple and the principal tanks, and the Superintendent pays Rs. 240 on account of a temporary force of 60 *barkandāzes* during the Rath Jātrā. Inside the temple, the only force consists of the Parihāris or hereditary guards, who are remunerated by grants of lands or paid from the temple funds, and of salaried guards paid monthly, such as *dafadārs*, *barkandāzes*, *dwāris*, etc.

INCOME.

The landed endowments of the temple consist of the Ekrājāt mahāls in the Khurdā subdivision and of the Satais Hazāri Mahāl, mainly in the headquarters subdivision, an account of which will be found in Chapter XII.

Besides the income obtained from landed endowments, there are a number of miscellaneous sources of revenue, of which a few may be mentioned, viz., (1) the *pindikā* or offerings made on the throne of the gods by the pilgrims. These include jewels, gold and silver ornaments, coins, silk and cotton cloths, shawls, plates, cups, umbrellas and fans. The money is spent, and the rest are removed to the wardrobe or treasury. Ranjit Singh, it may be mentioned, when on his death-bed in 1839, expressed a wish that the famous Koh-i-Nur diamond (then valued at one million sterling) should be sent to Jagannāth, but his wish was not given effect to. (2) The sale of *koth-bhoga mahāprasād*, or the daily offerings paid for from temple funds. (3) Miscellaneous payments made by the

sebāits at the time of first appointment, or for taking leases of fire-places in the temple kitchen, or for placing *bhoga* before the stone throne. (4) The sale of the wood and cloth used in the construction of the cars, which are considered especially holy. (5) Miscellaneous receipts from pilgrims, *e.g.*, for the privilege of having a private view of the gods, for permission to use fans, fly-flaps or lighted torches before the gods, for having flags and strips of coloured cloth hung from the temple tower, for having their names inscribed on the stones of Sātpāhāch and Baispāhāch, *i.e.*, the flights of 7 and 22 steps. (6) Various sums obtained by leases of various rights, *e.g.*, the right to sell sweet-meats, *mahāprasād* or *nirmālya* inside the temple, or the right to collect pice from pilgrims at the Rohinī-kund, Gundichā-bāri or the cook-room (*rosa-ghara*) when the gods are absent from the temple.

The Manager of the temple reports that in the three years 1903-04 to 1906-07 the average annual income from all sources was Rs. 1,39,586, the average annual expenditure being Rs. 92,569, and estimates that with careful management there should be a surplus of Rs. 20,000 or Rs. 40,000 per annum available for the repairs of the temple or any other work that may be necessary.

CHAPTER V.

PUBLIC HEALTH.

CLIMATE.

THE climate of the district is, on the whole, healthy, and except in certain swampy areas near the Chilkā lake, its inhabitants are comparatively free from malaria. The healthiest part of the plains portion of the district is the north of the headquarters subdivision, which is free from water-logging in the rains; the south, where the land is often flooded and remains submerged for over a month at a time, is considered unhealthy, when the water drains off or dries up. The belt along the coast is always cool, but is often unpleasantly moist and is apt to be enervating after long residence; while the Chilkā and its neighbourhood are damp during the rains, and the atmosphere is disagreeably saline in the hot weather. The climate of the Khurdā subdivision, on the other hand, is dry, and most parts are healthy, the only feverish tracts being the Māls, a wild hilly country lying to the west, and the neighbourhood of the Chilkā lake. In years of deficient rainfall, however, many parts of the subdivision suffer from want of a sufficient supply of drinking water, for the wells, tanks, springs and nullahs dry up or provide a scanty amount of bad water; in such years outbreaks of disease are almost inevitable. The railway is also a common source of infection. The stream of pilgrims coming to Purī by rail is a constant one, averaging about 20,000 a month and increasing at the time of the great festivals; and the possibility of the introduction of cholera and other epidemic diseases is obvious. It is believed that, but for deaths among pilgrims and the effect that pilgrims have on the resident population, both directly and indirectly, Purī would compare favourably with the healthiest towns in Bengal.

VITAL STATISTICS.

Previous to 1892, there were several changes in the system of registering births and deaths. In 1869 the duty of reporting deaths was imposed on the village *chaukīdārs*, and in 1876 the system was extended to births; but the returns received were so incomplete that they were soon discontinued, and, except in towns, deaths alone were registered until 1892, when the collection of statistics of births as well as of deaths was ordered, and the system now in vogue was introduced. Under this system

vital occurrences are reported by the *chaukīdārs* to the police, and the latter submit monthly returns to the Civil Surgeon, by whom statistics for the whole district are prepared. The statistics thus obtained are sufficiently accurate for the purpose of calculating the approximate growth of the population and of showing the relative healthiness or unhealthiness of different years; but little reliance can be placed on the classification of diseases to which deaths are attributed, owing to want of medical knowledge on the part of the reporting agency, which causes the *chaukīdār* to regard fever as a general cause of death. In the case of Purī, moreover, a large number of deaths take place among the thousands of pilgrims who visit the shrine of Jagannāth every year, and these deaths cannot be distinguished in the returns from those occurring among the residents of the district.

The most noticeable feature of the returns in recent years has been the rise in the birth-rate, which has steadily increased from 29·57 per mille in 1901 to 40·47 per mille in 1906. Only once has there been a lower birth-rate than that of 1901, viz., in 1892, when it was 29·31 per mille; and only once has there been a higher birth-rate than in 1906, viz., in 1899, when it was 43·19 per mille. The maximum mortality returned since the present system of vital statistics was introduced was in 1901, when the death-rate rose to 41·32 per mille, and the lowest death-rate returned was 24·88 per mille in 1896. Another feature brought out by the returns is that the death-rate in Purī town has been steadily diminishing, apparently as the result, in part at least, of the Bara Dānda drainage scheme, completed in 1895. The average annual death-rate in the Purī town during the five years preceding its introduction was 49·03 per mille, but it has been steadily decreasing, falling in 1906 to 25·82, while the mean of the previous 5 years was only 34·62 per mille. But although the scheme referred to has been valuable, it is by no means complete, and the real cause of the diminishing death-rate in Purī must be sought in the generally improved sanitary conditions brought about by constant and assiduous attention to conservancy on the part of the local authorities, and in the advent of the railway, which has tended largely to remove the congestion of the population not only on the occasion of great festivals, but throughout the year.

PRINCIPAL DISEASES. Fevers.

The following account of the fevers of Purī has been prepared with the help of a note communicated by Major E. E. Waters, M.D., I.M.S., late Civil Surgeon of Purī.

There are two sources from which information may be drawn regarding the prevalence of different diseases, viz., the death returns supplied by the police, and the attendance returns furnished

by the dispensaries. The first of these is unreliable, as the diagnosis of the cause of death is made by the village *chaukīdār*, and his medical training is not exhaustive. The tendency is to exaggerate the number of deaths from fever (using the term to denote malarial fever), and to group under that heading all diseases in which the temperature is raised; *e.g.*, pneumonia, pulmonary phthisis, and inflammatory conditions are all apt to be included under the vague heading of fever. Even accepting this classification, Purī district is prominent as being the least feverish in Bengal. As shown in the marginal statement, the death-rate from fever is less than half what it is in the Province as a whole; it has never been as high as 10 per mille since the present system of mortuary returns was introduced; and it has been known to fall as low as 5·31 per mille.

YEARS.	1901-05.	1906.
Purī ...	8·59	7·27
Bengal ...	21·78	22·41

The second method of estimating the fever rate is by examining the attendance of out-patients at the dispensaries. This too must be necessarily incomplete, as it depends entirely on the number of persons who use the dispensaries; but it is noticeable that in the district as a whole the total number of patients in 1905 was 93,370 and the number of cases of malarial fever was only 9,610.

The marginal table giving the death-rate per mille in 1905 and the preceding 5 years will be sufficient to show the incidence of the death-rate in different thānas. With reference to these figures it may be observed that the incidence of fever appears to depend largely on the physical conformation of the different circles. Purī town lies on flat ground, and is yearly surrounded by a large area of flood-water during the rainy season; as would be expected, the deaths from fever are more numerous when this water begins to subside, *i.e.*, in October, November and December. The areas of the Piplī, Gop and Purī (rural) circles are also somewhat flat, and especially in parts of the Gop circle the land is much flooded. Purī (rural), however, includes a large sandy tract in which drainage towards the sea and the Chilkā lake is fairly rapid, and this reduces the death-rate in that area. The two circles comprised in the Khurdā subdivision, viz., Khurdā and Bānpur, are

YEARS.	1900-04.	1905.
Bānpur	4·13	4·52
Purī (Sadar) ...	7·12	6·24
Khurdā	7·37	6·44
Piplī	10·09	8·58
Purī (town) ...	12·09	8·27
Gop	12·47	12·08

composed of high land with hills of porous laterite and metamorphic rocks, and are most favourably situated with regard to rapid natural drainage. Bānpur consists almost entirely of hills from which storm-water flows rapidly, and the people are particularly free from malarial fever. Khurdā has also a capital natural drainage through the laterite : indeed, this circle is not infrequently visited by drought.

Malarial fever. Malarial fever is not a common disease in the district as a whole; but only in certain parts, notably the areas round the Chilkā lake, where the people have the typical abdomens, yellow conjunctivae and unhealthy appearance characteristic of a fever district in Bengal. The reason for this is not far to seek. The south-western part of the district is practically a Tarai country, a low-lying tract with dense jungle, sloping to the sea from the hills of the Tributary States. Mosquitoes abound, and they are of a peculiarly pertinacious variety. Their infective power appears to be high, and the malarial fever that new-comers or visitors suffer from is of a very severe type. Apart from the malaria in this region, the disease is not a prominent one in Purī district, and appears to cause little interference with the ordinary avocations of the people. The number of cases varies from year to year, and some seasons are more malarious than others; but Major Waters remarks:—" I have at no time seen anything to correspond with the malaria of Bengal, or that in any way tallied with Hunter's description of Purī at the time his edition of the Gazetteer was published."

Other fevers. Regarding other fevers, Major Waters, writes as follows:— "Trypanosomiasis is, as far as I know, unknown in Purī. No cases have come under my notice, though it is probable that near the Chilkā lake some cases may exist. It is also probable that cases may be brought in by pilgrims. Filariasis is an extremely common affection in Purī, as in Orissa generally. Numerous cases occur in all areas, but it is particularly common to the north and east. The disease, as is well known, is caused by the *filaria sanguinis hominis*, which is inoculated with the bite of a culex mosquito. Sufferers from filariasis are attacked with fever (*bāt-jar*) at cyclical intervals, locally supposed to be influenced by the moon. The fever is usually accompanied by an inflammation or irritation of the affected part. The dependent parts of the body, scrotum, and lower limbs are most affected; and so far as my personal observation goes, the legs are most affected in Purī town, and the scrotum in Khurdā. The disease is not fatal, but causes much discomfort and some debility. Purī town swarms with foul cesspools and tanks, and these are the

breeding grounds for myriads of culex mosquitoes. It will be interesting to see what will be the effect in future years of the new drainage scheme on the number of filarial cases.

"Typhoid or enteric fever probably exists in Purī as in other towns, but I have never seen a case. Native practitioners tell me that it does occur, but it evidently is not common. Chicken-pox occurs occasionally in the jail and probably elsewhere. Pneumonia occurs, but is not very common; it is mostly seen amongst pilgrims, or rather debilitated persons, exposed to sudden and unexpected rain. Plague is unknown." An account of small-pox will be given later.

For many years Purī has had the evil reputation of being a focus of cholera, and a centre from which the disease spreads to other parts of India. "Purī city," Sir W. W. Hunter wrote 30 years ago, "is a hot bed of the disease. It only requires the annually recurring conditions of overcrowding, of filth, of great heat, of dampness, and sudden atmospheric changes, to turn the pilgrim city into a pest house. . . . The Car Festival annually slays its thousands. It occurs at the most unfavourable and inclement season of the year. Before its close the rains are pretty well advanced, the roads are cut up, the rivers are full, the roadside lodging-houses are close and steamy; and often the sole shelter for travellers is under trees dripping with rain." Cholera.

The chief force of the epidemics was concentrated in the town, but thence they spread into the district, especially to the villages along the Trunk Road. Here there were no proper arrangements for the accommodation of cholera-stricken patients, for water-supply, for latrine accommodation, or for the disposal of refuse. During the rainy season the roadsides were converted into huge sewage drains by the pilgrims, who encamped in swarms under the trees, or wherever they could find anything like a dry piece of ground, where they slept, cooked, ate, drank, and attended to the calls of nature openly and indiscriminately. Pilgrims entered the district enfeebled by exposure, by great heat and by exhausting marches. The unwholesome, uncooked and indigestible articles of food, on which they had to subsist during their long march predisposed to disease, the conditions of the town fostered it, and the deplorable ignorance and carelessness of the people themselves helped its ravages. They could not, or would not, understand how easily cholera may be passed on. With a light heart the pilgrim washed the stained clothing of a dead relative in the first convenient tank or well, and congratulated himself on his economy. Even as late as 1892 an officer

of Government, travelling on the Orissa Coast Canal after the festival at Purī, saw for days together the corpses of pilgrims, who had died from cholera, floating in the canals, into which apparently they had been thrown by their friends and relatives.

With the improvement of the sanitation and drainage of the town, which has been carried out in the last 30 years, the mortality caused by cholera has diminished, but epidemics still occur every year. A vicious circle has been formed in which the pilgrims infect Purī, and Purī in its turn affects the district. Year after year cholera commences up the pilgrim route or along the railway line, generally infects Purī town, takes hold among the pilgrims, and then spreads over the district. The insanitary condition of the villages, the polluted source of water-supply, which is often a fœtid tank, the use of unsuitable food, the domestic and personal hygienic habits of the people, are in every way favourable for propagating the disease; and some persons are so backward that they prefer dying to availing themselves of medical assistance. When they hear that a doctor has come, they shut their doors against him, and refuse to take medicine, as they believe that if they do so, the god will be angry with them.

Small-pox. The district is also notorious for the frequency with which epidemics of small-pox occur. In spite of the efforts made to popularize vaccination, the disease is very rife, especially in the more inaccessible parts; but the town of Purī is well protected, owing to vaccination being compulsory in the municipal area, and here only sporadic cases occur. In 1906 the death-rate from small-pox reached the high figure of 4·85 per mille.

Dysentery and diarrhœa. In Purī, as in other districts of Orissa, the mortality due to dysentery and diarrhœa is unusually great; in fact, the death-rate in recent years has been higher than in any other district in Bengal except Patna and Howrah. The prevalence of diarrhœa and dysentery in Orissa has recently been made the subject of a special enquiry, the object being to ascertain whether their prevalence was as great as would appear from the high death-rate persistently returned or whether it was due to error on the part of the reporting agency. The conclusions arrived at are that the high reported death-rate does more or less represent the state of affairs, and that diarrhœa and dysentery, particularly the former, are a frequent cause of death in this part of the country, their greatest incidence being in February and March. Dysentery is fairly common, but does not cause so many deaths as acute diarrhœa. The death-rate is, however, undoubtedly increased by

the fact that typical and lingering cases of cholera are reported as diarrhœa. Infantile diarrhœa is extraordinarily common, and is the chief cause of the high death-rate. Generally speaking, the causes of these diseases are the bad water-supply, the eating of new rice as soon as it is reaped, and the general ignorance of the people.

Vaccination is unpopular in Orissa, where the people are more conservative, less enlightened, and more wedded to superstitious beliefs than in Bengal. Inoculation has, on the other hand, been ractised for ages past, and the people believe in it. They see that its effects are serious, and they think that the powers of the goddess of small-pox are manifested by the eruption; while, as its substitute is not followed by an eruption or, as a rule, by fever, they distrust its powers of protection. This prejudice against vaccination is slowly dying out, but exists in an obstinate form in the villages of Sāsani Brāhmans; and inoculation is said still to be practised on the borders of Cuttack and the Tributary States. In spite of this, good progress has been made in introducing vaccination; and in 1906-07 the total number of persons successfully vaccinated was 38,662, representing 39·94 per mille of the population, while the average annual number in the preceding 5 years was 39,941 or 41·26 per mille. **VACCINATION.**

Purī is visited yearly by thousands of pilgrims from all parts of India. To deal with the immense crowds gathered together in a few days, has always been a grave sanitary problem, and it has therefore always been the aim of Government and the local authorities to ameliorate, as far as possible, the condition of the pilgrims, and to prevent the outbreak of disease, due care being taken at the same time not to offend the religious prejudices of the people. **SANITATION.**

To enable a proper estimate to be formed of the sanitary improvements carried out in Purī town in recent years, it will not be out of place to quote from a sanitary inspection report written by Dr. D. Smith, Sanitary Commissioner of Bengal, in the year 1868, and to compare his description with the state of affairs now existing. First, with regard to dwellings, he stated:—"The houses are very faulty from a sanitary point of view. Noxious ooze is continually trickling from the opening in every plinth, down its front, to a sink or cess pit below. Sometimes even within the plinth itself a dark, deep, open cess-pool exists." A marked and most gratifying improvement in the condition of the houses may now be observed. In the plinth of nearly every masonry house in the town may be seen the sites of the former cess-pools which have been filled up, a pipe now **Drainage.**

passing through the centre of each, and conveying the domestic water into suitable receptacles. This work is one of the most important sanitary improvements that have been carried out in Purī. It is difficult to imagine a graver menace to the public health, or a more complete defiance of sanitary laws than these cess-pools, situated as they were, in the floor of the verandah of the house, holding large quantities of house water, urine, and fœcal matter, and poisoning the air with the foul gases emanating from the festering sewage contained in them. To complicate and intensify this evil, it was the custom of the owners to allow the contents of the cess-pools to flow into the main streets. One would have thought that they would have been only too glad to be relieved from the noxious smells arising from these cess-pools ; but, as a matter of fact, they were almost unanimous in desiring to retain them, and did all in their power to frustrate efforts to do away with the evil. It may be added that a complete surface drainage scheme for the removal both of rain and sullage water throughout the town is now contemplated.

Over-crowding. Another grave difficulty in connection with the sanitation of Purī is how to provide good and sufficient accommodation for the vast numbers of pilgrims. In former years no supervision was exercised, and the aim of every house-owner was to crowd as many persons as possible into each room, in order to reap a rich harvest thereby, regardless of ventilation or overcrowding. The Sanitary Commissioner, describing this state of affairs in 1868, said:—"In the lodging-houses they (the pilgrims) are crowded to such an extent that I was shown one apartment in the best pilgrim hotel of the place, in which 80 people were said to have passed the night. It was 13 feet long, 10 feet 5 inches broad, with walls 6½ feet in height, and a low pent-roof over it. It had but one entrance, and no escape for the effete air." Again, the District Superintendent of Police, Purī, remarked in his diary dated the 4th June 1867:—"I went into a house in the town this afternoon, where about 45 pilgrims were putting up—men and women. The place had only two doors, no windows; and one of the doors was locked. This place measured 12 by 20 feet—certainly not more—and in it no less than 45 people were crammed." These two descriptions read more like an account of the historical Black Hole of Calcutta than of lodgings provided by Hindus for their co-religionists.

A notable advance has been made since those days. There are now a large number of lodging-houses in the heart of

the town, in which pilgrims find shelter. Every lodging-house-keeper has to take out a license; all the rooms in the lodging-houses have been measured, and their cubic capacity estimated; in each room there is a notice stating the exact number of people that may be accommodated in it; and the lodging-house-keeper is prosecuted for any excess which may be detected. Special efforts have also been made to provide accommodation for excess pilgrims by the erection of tin sheds at the side of the Bara Dānda road, and also of large rest-houses raised from the benefactions of pious Hindus. But, notwithstanding this, overcrowding still sometimes occurs, and thousands of pilgrims, rich and poor alike, for want of accommodation, have to sleep out in the open, under trees or in any temporary sheds they may themselves be able to erect, suffering no slight inconvenience and discomfort, which are not conducive to health.

Conservancy.

In addition to overcrowding and insufficient ventilation, there was in former years another serious sanitary evil in connection with the lodging-houses, viz., the want of proper latrine accommodation. Writing in 1868, the then Sanitary Commissioner said:—"For centuries every variety of nuisance has been committed throughout the precincts of the place, and it is now, in many parts, loathsome from the concentrated and persistent odour of fœcal matter in a state of decomposition. The cloacal abominations discoverable in the gardens, intensified by heat and moisture, are almost unapproachable. The gutters are equally offensive. On all sides the air is foul to suffocation with emanations from garbage and putrescent debris." In the 40 years which have elapsed since these remarks were made, sanitation has made great strides. Though it has not yet been found possible to provide complete latrine accommodation for the multitudes visiting Purī during the principal festivals, every lodging-house has now a latrine attached to it, and there are a number of permanent public latrines, besides temporary latrines to meet increased requirements during the festivals.

Water-supply.

The most important sanitary needs of the town are a good drainage system and an improved water-supply. At present, drinking water is obtained mainly from wells and tanks; the latter are often insanitary, while the inferior quality of the water which the former contain, as well as their faulty construction, is now, as it has been for years past, a grave sanitary evil. There are a considerable number of tanks in the town, of which four are of particular importance, since they are the only ones resorted to by the pilgrims for purposes of religious purification.

These are the tanks called Swet Gangā, Narendra, Mārkanda, and Indradyumna. The Swet Gangā tank is of special sanitary importance. It is situated in the heart of the town, it is surrounded by houses, and its water-level is about 40 feet below the surface. This tank is said to have been used by pilgrims for ablution and purification for 700 years, and until recently was never dewatered. It used also formerly to receive the drainage of a part of the town; and its state after these centuries of neglect may be gathered from the description given by the Sanitary Commissioner in 1868. "I examined," he wrote, "the water from the Swet Gangā tank and found that it evolved a strong odour of sulphuretted hydrogen, and became of a deep chocolate colour on the addition of a solution of lead." In 1890 the Civil Surgeon described it as "a disgrace to civilization; to walk round it makes one turn sick from the stench;" but in spite of this and of efforts to put a stop to the use of its water, the tank was still used by pilgrims. The water was of a rich green colour, giving off a most offensive smell, and in 1893 the Chemical Examiner, who analysed it, stated that it "resembles liquid sewage, which is not surprising, considering the various forms of the worst pollution to which the water has been subjected for seven centuries." Since that time, the discharge of drainage into the tank has been stopped; it is replenished by rain water and some springs said to exist in its bed; and, what is of even greater importance, since 1904 a scheme has been in operation, by which it is cleansed daily by means of a pulsometer pump, and the water pumped out is used to flush the drains by the side of the Bara Dānda road.

Disposal of dead.

The last matter which need be noticed is the disposal of the dead, which is now effected at a properly constructed burning *ghāt*. Contrast this with the state of affairs in 1868, when the Sanitary Commissioner wrote:—"The corpses are, in many instances, but imperfectly consumed; the result is a spectacle frightful to behold. In no single case, however, can this last long, as jackal, vultures, and other beasts of prey soon come, and leave but whitened skulls and crumbling bones. Places such as these are usually termed Golgothas by the European residents in Orissa. During one of my evening walks with Mr. Raban, towards the northern part of the sands, we came upon a spot marking the former site of several sheds erected for the reception of those who were famine stricken in 1866: close to this was a Golgotha indeed: within a radius of 20 feet I counted 60 skulls, and a little further on, in a radius of 4 feet, 24 skulls."

This is a gruesome picture, but an account of Purī written in 1841 is even more ghastly. "Corpse fields lay round the town, in one of which the traveller counted between 40 and 50 bodies, besides many skeletons which had been picked by vultures. The birds were sitting in numbers on the neighbouring sand-hills and trees, holding carnivorous festivity on the dead; and the wild dogs lounged about full of the flesh of man. But the streets and lanes of the town, as well as the large road, presented many scenes of the most appalling misery and humiliation. In several instances poor deserted women, quite naked, formed a dam to the insufferable filthiness of a thousand bodies washed down the narrow streets by the sudden showers. Here they lay, throwing about their arms in agony, imploring a little water of the heedless passers-by, who formed a half-circle around them for a moment and passed on. They had rolled about till they had lost their clothing, which was discernible at a small distance, beaten by the battering rain till it had mixed with the sand and mud. Others lay quiet enough, covered over by their cloth, except perhaps their feet and hands, having apparently died without much struggling. Others again, in their last extremity, with their clothing soaked, and their skin white with the soddening rain, had crawled under the partial shelter of some house or shed, awaiting in apparent insensibility their last moment."*

On the other hand, we have the testimony of Mr. Fergusson, who visited Purī in 1838, that he found nothing to justify the highly wrought picture of "hundreds of dead and dying pilgrims that strew the road and of their bones that whiten the plains."

Lodging-House Act.

No account of the sanitation of Purī would be complete without a reference to the Lodging-House Act. As already stated, one of the greatest difficulties in the administration of the town is to check overcrowding in the lodging-houses for pilgrims. In 1866 a Bill was introduced into the Bengal Council for the better regulation of such establishments, and was finally passed with amendments in 1868. It received the assent of the Governor General in 1871 and is called the Purī Lodging-House Act (Act IV B. C. of 1871). It provides for the appointment of a Health Officer to inspect the lodging-houses and report on them to the Magistrate. Under this Act no house may be opened without a license, and licenses are granted only upon a certificate from the Civil Surgeon, stating the suitability of the tenement for the purpose, and the number of persons which it can

* Letter to Lord Fitzgerald and Vesci on Jagannāth, 1843, quoted in Sir W. W. Hunter's Orissa, Vol. I, pp. 152-153.

properly accommodate. Except in cases where the lodging-house-keepers are persons of known respectability, their establishments continue under the surveillance of the Health Officer; and penalties are provided for wilful overcrowding and similar breaches of the license. Much good has resulted from the operation of this Act, the primary object of which is to prevent the outbreak and spread of disease, particularly disease of an epidemic character, and to provide a source of revenue for improving the sanitation of the town and its approaches.

An Act, called the Purī Lodging-House (Amendment) Act, 1908, has recently been passed by the Bengal Legislative Council, the chief objects of which are to provide further safe-guards against overcrowding in lodging-houses, to give Government power to increase the fees for licenses for the reception of lodgers with a view to securing the funds necessary for proper sanitation, to render the inspection of lodging-houses more practicable, and to remove a few minor defects in the existing Act which the practical working of the law has disclosed.

The receipts constitute what is known as the Purī Lodging-House Fund, and are obtained mainly from the fees for licensing lodging-houses; other minor sources of income are fees for the Health Officer's certificate, the rent of roadside lands, fines, etc. After making contributions to the Purī Municipality, the income is applied to the following purposes:—the Health Officer's pay and allowances, office establishment and contingencies, dispensaries and other medical expenditure, conservancy, construction and repairs, and miscellaneous charges. From this fund the Purī Cholera Hospital and the dispensaries at Bhubaneswar and Satyabādī are maintained, and a conservancy staff is entertained, besides servants at rest-houses (*chattis*) along the pilgrim routes.

According to the returns for 1905-06, there are 730 licensed lodging-houses, which have accommodation for 20,098 persons, and there are also two rest-houses (*dharmsālās*) under the control of the Fund. One of these, by the side of the Narendra tank, is called the Pandit rest-house after its founder Bābu Kanai Lāl Pandit; the other, by the side of the Bara Dānda, is known as the Boglā rest-house, having been erected by Bābu Kanai Lāl Boglā. In these rest-houses the pilgrims are charged no rent.

INSTITUTIONS.

Thirty years ago there were only two charitable medical institutions in the district, viz., the Purī Pilgrim Hospital, established in 1836, and the Khurdā dispensary, established in 1864. There are now no less than ten general hospitals or dispensaries. In the town of Purī there is, in addition to the large

Pilgrim Hospital, a Cholera Hospital and a dispensary at the Lion Gate ; and in the interior there are charitable dispensaries at Bānpur, Bhubaneswar, Gop, Khurdā, Piplī, Sātparā and Satyabādī. The Purī Pilgrim Hospital has accommodation for 40 male in-patients and 20 female in-patients, and the Cholera Hospital for 20 males and 20 females ; the Lion Gate dispensary affords outdoor relief only. Of the other dispensaries those at Bānpur, Bhubaneswar, Gop and Khurdā have 6 beds each, that at Piplī has 14 beds, and those at Sātparā and Satyabādī have 8 beds each.

Though the majority of the people still adhere to the *kabirāji* system of treatment, European medicines and methods are distinctly coming into favour ; and religious prejudices have so far given away that in places such as Bhubaneswar and Satyabādī the average daily attendance is as much as 50 to 60 patients, including even high class Hindu women. Proportionately to the area of the district, however, the number of dispensaries cannot be said to be large, for it is estimated that the area served by each is a circle with a radius of 5 or 6 miles.

There is also a Leper Asylum in Purī town, at which lepers are fed on *mahāprasād* given free by different *maths* in the town. Three charitable Hindu zamīndārs of Balasore have also endowed certain property in the Purushottampur estate in this district for the purpose of providing food for lepers, the endowment being known as the Rāj Nārāyan Dās Endowment. A donation of Rs. 2,000 has recently been made by Kumār Rāmeswar Māliā for the construction of a hospital for the leper colony.

CHAPTER VI.

FORESTS.

GENERAL DESCRIPTION.

THE Purī Forest Division is situated entirely within the Khurdā subdivision and consists of reserved and protected forests extending over an area of 485 square miles. The reserved forests contain 20 separate demarcated blocks having an area of 113 square miles, while the protected forests comprise all unsettled waste lands in the subdivision. The latter are scattered all over the subdivision and have not been demarcated; their area is estimated to be 372 square miles, while that of the whole subdivision is 1,013 square miles. With the exception of a few small blocks on level ground, the forests are situated on hills varying in elevation from 500 feet in the north to nearly 3,000 feet in the south.

They lie within what is technically known as the dry evergreen forest zone, and for general purposes may be classified under two main divisions, viz., *sāl* forests, in which *sāl* (Shorea robusta) predominates, and mixed forests, in which *sāl* is not the prevailing species. In forests of the first class *sāl* forms practically pure forest, while in others the following species are found:—*āsan* (Terminalia tomentosa), *rai* (Dillenia pentagyna), *kendu* (Diospyros melanoxylon), *kasi* (Bridelia retusa), *kongra* (Xylia dolabriformis) and *sidhā* (Lagerstrœmia parviflora).

The *sāl* forest is seen at its best in the metamorphic region to the south-west of the Division, where trees 3 to 5 feet in girth and 60 to 80 feet high are found. The chief companions of *sāl*, besides those already mentioned, are *kumbi* (Careya arborea) and *charo* (Buchanania latifolia), while such species as *piāsāl* (Pterocarpus Marsupium) and *jām* (Eugenia Jambolana) are occasionally met with. The species of bamboo known as *kantābāunsa* (Bambusa arundinacea) and Dendrocalamus strictus both occur, the former being found more frequently in low-lying localities. Climbers are numerous, the most noticeable being

This chapter has been compiled from notes communicated by Mr. A. L. McIntire, Conservator of Forests, Bengal, and Mr. J. P. Draper, Extra Assistant Conservator of Forests, formerly in charge of the Purī Forest Division.

Bauhinia Vahlii, which grows to an immense size, Millettia auriculata, and Entada scandens.

As regards the mixed forest, it varies considerably from place to place, being nothing more than a low scrub-jungle in some places, while in others it is a good high forest. The best portions are in the south-west of the Division, where trees of 4 to 5 feet in girth and 60 to 80 feet high are found, the chief species being *dhau* (Anogeissus latifolia), *moi* (Odina Wodier), *kusum* (Schleichera trijuga) and *rai* (Dillenia pentagyna). In the north-west of the Division *kongra* (Xylia dolabriformis), the iron-wood tree of Pegu and Arakan, is extremely common, being gregarious in places. Other common species are *āsan* (Terminalia tomentosa), *kochilā* (Strychnos Nux vomica), *sidhā* (Lagerstrœmia parviflora), *kurum* (Adina cordifolia), the Indian laburnum known locally as *sunāri* (Cassia Fistula), *piāsāl* (Pterocarpus Marsupium), *gambhāri* (Gmelina arborea), *mahānīm* (Ailanthus excelsa), *baherā* (Terminalia belerica), *bheru* (Chloroxylon Swietenia), *jām* (Eugenia Jambolana), *bandhan* (Eugenia dalbergioides), the banyan (Ficus bengalensis), *harirā* (Terminalia chebula), *charo* (Buchanania latifolia), *suam* (Soymida febrifuga), *kumbi* (Careya arborea), *sisu* (Dalbergia Sissoo), *tinia* (Albizzia Lebbek) and the mango or *āmba* (Mangifera indica). There are also numerous kinds of thorny shrubs and three kinds of bamboo; a small variety of Bambusa arundinacea is found in the north-west, and a large variety in the south-west, while Dendrocalamus strictus and Oxytenanthera nigrociliata (which is rare) are also found. The most noticeable climbers are Combretum decandrum, Millettia auriculata and Bauhinia Vahlii.

The chief timber trees are *sāl*, *āsan*, *kongra*, *tinia* and *piāsāl*; firewood and charcoal are obtained from a large variety of trees. There are no minor products of strictly local importance, except perhaps edible fruits, such as mango and jack. The residents of the south-west of the Division obtain *kamalāgundi* powder from the fruit of *gundi* trees (Mallotus phillipinensis) on their leased lands, and sell it either to the Forest Department or to traders in Ganjām, where it is used for dyeing purposes. Nux vomica seed, which is used medicinally, is collected by the Department, and is generally purchased by traders from Cuttack. Other minor products are *harirā* and *baherā* seed and *sunāri* bark, which are used for tanning.

HISTORY.

Before 1870 no restrictions were placed on the cutting of trees, and the main idea seems to have been to extend cultivation as far as possible. But in 1871 the Subdivisional Officer drew attention to the fact that the forests were being destroyed by the

ryots and others, and efforts were made to stop this destruction, restrictions being placed on felling, the removal of certain kinds of forest produce, and the practice of temporary cultivation. In spite of this, the Conservator of Forests reported in 1881 that the forests were in a deplorable condition. The unsettled lands in the Khurdā estate were declared protected forests in 1880, and this area was taken over by the Forest Department in 1883, reserved blocks being notified during 1885, 1886 and 1891. From 1883 to 1895 forest conservancy, including protection from fire in the reserves, was established, and from 1896 to 1903 inclusive the reserves were managed in accordance with Mr. Hatt's working plan. In 1903 experimental coppice fellings were made. These were extended in 1904, when the improvement fellings prescribed for the better forests of the northern and central ranges were discontinued, the coppice system having been decided on for these ranges. Mr. Hatt's working plan has since been revised by Mr. Monteath, and the revised prescriptions for working came into force from the 1st July 1906.

Measures of conservancy.

The following account of the past history, present working and future prospects of the forests is quoted from a note by Mr. A. L. McIntire, Conservator of Forests, Bengal:—

"In 1883 the forests were placed under the management of the Forest Department, a forest settlement being carried out at about the same time. Under the latter a total area of 110 square miles of forest was declared reserved forest, free of rights, and the rest of the forest and waste, with an estimated area of 356 square miles, was declared to be protected forest, in which revenue-paying ryots were allowed to exercise a number of privileges, such as grazing their cattle and cutting bamboos and trees, of kinds which were not reserved, for making their houses, agricultural implements, etc., and for firewood. The most important timber and fruit trees were reserved, and they were not allowed to cut or damage them, nor were they allowed to cultivate any parts of the protected forests before such parts were properly leased to them; and they were required to pay grazing fees for cattle in excess of the numbers supposed to be necessary for ploughing and manuring their fields, and cesses for permission to remove unreserved trees for firewood, etc. Since 1883 the 110 square miles of reserved forest have been carefully protected from fire, grazing and unauthorized felling; and efforts have been made to increase the productiveness of these forests by planting teak in small parts of the area. Under this management the growth of trees has steadily improved; and though it is now believed probable that in the northern half of the area, on account of the poorness of the

soil, few of the trees will grow to much over 3 feet in girth, it has become evident that in the southern half of the area fine trees of many kinds can be grown. Consequently, though during the period 1883 to 1904 very few trees were cut, as it was desirable to give the forests rest that they might recover from the former excessive cutting and fires, since 1905 the following method of working them has been followed.

SYSTEM OF MANAGEMENT.

"The northern half of the forests has been divided into 30 equal parts or coupes, each part or coupe consisting of a number of separate areas situated in different parts of the estate; and these parts or coupes are opened for felling in rotation at a rate of one coupe a year. In the year in which a part or coupe is open for fellings, every tree and shrub it contains, with the exception of a few very promising trees which are marked before the fellings begin that they may be left standing for seed, is cut down level with the ground. Experience has shown that when such forests are cut in this way, shoots from the roots of the trees which have been cut (called coppice shoots) and seedlings rapidly spring up, and, if the ground is protected from fire and grazing, soon cover it with a new growth of trees. As only one-thirtieth of the total area of the northern half of the reserves is cut every year, the whole of that area will be cut in 30 years, by which time the part or coupe cut in 1905 will be again ready for cutting. In this way there will be a permanent supply of poles, such as ryots require for their buildings, and firewood, and also, in time, a small supply of larger sized timber. This method of cutting forests (called coppice felling) is unsuitable when the soil is good, and it is worth the while of the owner of the forest to keep all or most of the trees standing till they attain large size, such as a girth of 5 to 6 feet or over.

"In the southern half of the reserved forests, as the soil is generally good, and as most of the area is very distant from villages and towns which require poles and firewood, it has been decided to grow large trees, *i.e.*, those over 6 feet in girth, which are generally 100 to 150 years old. *Sāl* is the most valuable tree, and at present, though there are many seedlings and small poles, and a fair number (viz., 115,000) of *sāl* trees 3 to 4½ feet in girth, there are only 20,000 *sāl* trees over 4 feet 6 inches in girth. It has been supposed that the 115,000 *sāl* trees now 3 to 4½ feet in girth will be ready for cutting 60 to 70 years hence, and that in the next 60 years only the 20,000 trees which are now over 4 feet 6 inches in girth can be cut. Hence from 1905 the number of large *sāl* trees to be cut is fixed at 300 a year, the fellings being called "selection fellings." This rate of cutting will be kept

up for 15 years, *i.e.*, till the year 1919, after which it should be possible to cut a larger number of *sāl* trees. In short, it should be possible to increase the rate of felling at intervals of about 15 years, and in 100 years' time the forests should yield 4,000 or more large *sāl* trees a year. Other kinds of trees are also becoming saleable; and as a part of the area which does not contain *sāl* is suitable for teak, teak is being planted in that part at the rate of 100 acres a year. If these teak plantations are successful they should eventually produce a large additional revenue.

"To regulate the cutting of bamboos in the reserves the whole area of these forests has been divided into two parts which are opened for the cutting of bamboos in alternate years. In most other districts Government forests are divided, for the cutting of bamboos, into three parts, so that each part may be closed for 2 years after it is cut. It may become necessary to adopt this arrangement in Khurdā. Bamboos have greatly benefited from fire protection.

PROTECTED FORESTS. "In the large area of protected forest, management has only consisted of the prevention of fires, of unauthorized cultivation, and of the cutting of reserved trees; and ryots have grazed their cattle and cut unreserved trees and bamboos as they required them. In many places, owing mainly to the heavy grazing, the unreserved trees which have been cut have not been replaced by coppice shoots or seedlings. Hence on extensive areas, where reserved trees were scarce, there is now hardly any tree growth, and on still more extensive areas there is only a poor crop of reserved trees. Dense forest growth only remains in remote places, which are so distant from villages that the ryots have not yet thought it worth their while to remove poles or firewood. The conversion of some of the best remaining parts of the protected forests into reserved forests, that grazing and cutting may be regulated to provide for the cutting of the poles and firewood required by the ryots without allowing the forests to be destroyed, is under consideration.

REVENUE. "From 1883 till 1890 all the forests in the Khurdā estate formed part of the charge of a Forest Officer, who also held charge of the Angul forests; and it is not possible to give the exact financial results of their management during that period. During it very little produce or revenue was obtained from the reserves, but the loss on account of the cost of protecting the reserves appears to have been about covered by the revenue of the protected forests, which almost entirely consisted of cesses and grazing fees paid by the ryots. Since 1890 the Khurdā forests

have formed a separate forest charge, and there has been a progressive increase in the revenue, as shown in the table below:—

Period.	Average yearly revenue— From reserved forests.	From protected forests.	Total.	Average yearly expenditure.	Average yearly surplus.
	Rs.	Rs.	Rs.	Rs.	Rs.
1890 to 1899	4,642	15,845	20,487	19,231	1,256
1900 to 1904	9,556	23,379	32,935	23,233	9,702
1905-1906	23,084	35,467	58,551	28,830	29,721
Expected for 15 years, *i.e.*, 1905 to 1919.	34,000	26,000	60,000	30,000	30,000

"There is no reason to expect any large additional increase in the revenue of the protected forests. But the outturn and revenue obtained from the reserved forests will, for the reasons given above, continue to increase for many years to come. It is most probable that 30 years hence the yearly surplus from the reserved and protected forests will be over Rs. 60,000. Of the expenditure now incurred, Rs. 10,000, or about a third of the total, is paid for improvements, such as fire protection, roads, buildings, creeper cutting and the cutting of inferior kinds of trees which are covering up young *sāl*, teak plantations, etc. The object of such expenditure is to increase the value and usefulness of the forests to future generations. The last remark especially applies to expenditure on teak plantations, which cannot produce any revenue till they are 40 or 50 years old, and will not give a full return till they are 80 or 100 years old. They are to some extent experimental, as, till large teak trees are produced, it cannot be said for certain that the locality is really suitable for teak. Though the profit obtained from the Khurdā forests will in time become considerable, it is perhaps a less important consideration than the maintenance of supplies of timber and firewood for the Khurdā ryots and neighbouring towns, which depends on the careful management of these forests." PROSPECTS.

For the purposes of management the reserved forests are divided into three working circles, which, with the surrounding protected forests, are included in three ranges or units of management. The three circles are the Chandkā circle in the northern range, the Khurdā circle in the central range, and the Bānpur circle in the southern range. The Chandkā and Khurdā circles are being worked under the coppice system with a rotation of ADMINISTRATION.

30 years, while the Bānpur working circle is being worked under the selection method. For convenience of working, and to meet demands in the Khurdā estate, the Chandkā and Khurdā circles have been subdivided into a number of felling series scattered over the whole area, and an annual coupe in each of the felling series or blocks is opened each year. Each of these annual coupes is sold by auction to a single purchaser, who is responsible for the working of the coupe and for the removal of its produce under bond, the actual execution of the work being supervised by the Forest staff. In the Bānpur working circle an annual coupe is also opened each year, and the trees to be removed are marked by the Divisional Forest Officer. It is intended that these shall eventually be sold by auction while still standing in the forest, but at present this system has not been introduced, and exploitation is carried on departmentally, the outturn of logs being finally sold by auction at the nearest railway station.

The output of the coupes of the Chandkā and Khurdā circles consists of small timber, firewood and charcoal, which are mostly exported to Cuttack and Purī. Large timber is obtained from the Bānpur circle only, the *sāl* wood extracted being sold by auction at the Bālugān railway station and exported to Cuttack and Purī for use in buildings. The right to collect and remove minor produce of all kinds is leased out by ranges. The most important of these leases confer the right to collect *sunāri* bark for tanning and Nux vomica seed for medicinal purposes. A certain quantity of stone, chiefly laterite, is also removed on permit for building and road metalling.

The protected forests are worked under liberal rules framed under sections 29 and 31 of the Indian Forest Act, which provide for the removal of all kinds of produce required by the local population and allow grazing for their cattle. A cess of 6 pies per rupee of land revenue assessed is levied on all landholders, in return for the forest produce used, while a fee of 4 annas per annum per head of cattle is levied for all cattle over and above the number allowed free to each landholder for the purposes of cultivation and household requirements.

PROTECTION.

No special arrangements are made to protect the scattered, undemarcated protected forests from fire, the only protection afforded being such as is provided by the rules mentioned above. In the reserved blocks special protective measures are undertaken and these consist of burning clean all outer boundary lines and several interior fire lines at the commencement of the dry season, which lasts from February to June. A staff of special fire patrols is also retained during the season. These measures have been carried out

since 1885, and about 98 per cent. of the area undertaken has been successfully protected since then. In the reserved forests the majority of offences are petty, consisting either of cattle trespass or illicit fellings and removal of trees. For purposes of protection each range, comprising both reserved and protected forests, is divided into beats, and each beat is in the charge of a Forest Guard assisted by one or more forest *paiks*.

RELATIONS WITH THE PEOPLE.

The people are almost exclusively agricultural. Their wants in the way of forest produce are chiefly bamboos, fuel and small timber for house posts and agricultural implements. No rights of any sort have been admitted in any of the reserved forests; but the protected forests have been specially set aside to supply their wants under the rules above mentioned, which include the payment of a forest cess to Government. The privileges enjoyed by the people under these rules have, however, been much abused, so that they are now more or less dependent on the reserves for both timber and bamboos. There are no special fuel and fodder reserves, and, as stated above, all local requirements are met from the protected forests. The latter are also used during September, October and November by outside graziers on payment of a fee for each head of cattle. No grazing is permitted in the reserved forests.

CHAPTER VII.

AGRICULTURE.

GENERAL CONDITIONS.

Natural divisions.

For practical purposes, the district of Purī may be regarded as consisting of two sharply defined divisions—the plains and the hilly tracts, the former occupying the south-east and the latter the north-west of the district. The two are separated by the river Dayā, which forms a natural boundary. The country to the north-west is studded with hills, and a large portion of the area is covered with jungle. The soil is mostly lateritic, but in places where the soil is suitable, as in some of the valleys, a large area is cropped with *sārad* or winter rice. Almost the whole of this hilly tract is included in the Khurdā subdivision and is under the direct management of Government. The country to the south-west of the Dayā is marked by an almost entire absence of hills, there being only a few detached outliers, such as the Dhauli hills and the hills close to the Delāng railway station, which rise somewhat abruptly from the alluvial plains. In this portion of the district there is practically no laterite or jungle, and almost the whole of the cultivable land is under the plough. The high lands, for which no means of irrigation have yet been devised, are cultivated with *biāli* or autumn rice, pulses, etc, while *sārad* or winter rice is grown in the marshy depressions known as *pāts* and in other low-lying lands. This portion of the district is comprised almost entirely in the headquarters subdivision, and a portion of it is under the direct management of Government.

Another marked difference between the two tracts is that the headquarters subdivision is liable to have its crops destroyed by inundations, while the Khurdā subdivision is practically immune, for no part except Balabhadrapur on the Chilkā lake is visited by heavy floods. Cultivation in the latter subdivision is, moreover, favoured by the deposit of vegetable matter washed down from the hills on the western border. On the other hand, the crops suffer to some extent from drought in places where the water runs off rapidly or where there is only a thin covering of soil above the laterite. The majority of the fields here are laid out in terraces, and in order to retain water, are surrounded with small raised banks of earth called *hira*. It is the immemorial

custom for the ryot to repair only the ridges separating his field from one on a lower level; and any attempt to repair or to reduce the size of the *hira* between his field and one on a higher level leads to disputes and not infrequently to fights. In this tract too the people are still in the habit of utilizing the uplands for hoe cultivation, locally known as *toilā*, which is mainly carried on upon newly cleared portions of scrub jungle.

Rainfall. Purī has in ordinary years abundant rain, the normal annual rainfall being 55·66 inches. It has been known to be as high as 136 inches (in 1862), but on the other hand, deficiency is more frequent than in the other sea-board districts of Orissa, and Purī is the only district where the fall is occasionally less than 40 inches. Unfortunately, too, the rainfall is precarious, and an untimely or unequal distribution is liable to cause serious damage to the crops, even if the actual fall does not fall short of the quantity required. A heavy shower in February or March is necessary to enable the land to be ploughed, but the most critical months are May, September and October. If the May showers, which are the precursors of the monsoon rains, do not fall, sowing may be prejudicially delayed; but deficiency in the rainfall in September and October is even more dangerous, as it affects the maturing of the staple rice crop. The most terrible famine the district has ever known was caused by the failure of the September and October rains in 1865; and in 1896, with a rainfall very little below the normal, serious loss was caused by the cessation of the rains early in September. On the whole, it may be said that a well distributed rainfall of 40 inches is sufficient to secure the crop, provided that not less than 4 inches fall in October; but in order to obtain a bumper crop, at least 50 inches are required, of which 8 inches should fall in September and 6 inches in October.

Floods. Besides this, the district is liable to inundation from the rivers overflowing their banks when swollen by heavy rainfall in the hills. When they are of great height and of long duration, or when they occur so late as to render resowing impossible, very serious damage is done by such floods. Provided, however, that they are not high, subside rapidly, and come early in the season, they are productive of good, as the fertilizing silt they leave behind renews the productive powers of the soil and assures good harvests. Much damage is also done along the littoral by salt floods sweeping up from the sea. This subject will be dealt with more fully in the next chapter.

Soils. In the headquarters subdivision the soil is of the usual alluvial type found in deltaic country, except in the west, where the

subdivision encroaches on the laterite uplands of Khurdā, and on the south and east, where the sandy littoral forms a belt of varying width. There is every variety of admixture from almost pure sand to almost pure mud, but generally speaking, the lighter soils, such as sandy loams, are most abundant in the north, where there is much diversity of level, and the black soils are found more widely in the lower levels of the southern *parganas*. The cultivators themselves recognize a large number of different classes of soil, the names of which vary according to their situation, elevation and composition.

In an ordinary village the lands fall primarily under three main divisions according to their situation, viz., (1) the low lands retaining rain water and hence called *jala* or wet lands, on which winter rice is grown. These lands predominate in the district and comprise the greater part of the whole cultivated area. (2) The high lands round the village homesteads, which being enriched by manure and household refuse, have a blackish colour and are therefore called *kalā;* they are devoted to vegetables, cotton, and other valuable crops. (3) The riverside lands (*pāla*), which being periodically fertilized by deposits of silt are suitable for growing tobacco, sugarcane, *kulthī*, etc. Other common names are *diha*, *i.e.*, homestead land, *gorā* or light-coloured land, *nadīpatu* or riverside land and *sarpatu* or watery land. There are numerous names again given to different varieties of land according to its composition, colour, etc. Among these may be mentioned *bāliā matāl*, a sandy loam, *chāuliā matāl*, a friable soil of a brownish colour, *sudh matāl*, a muddy soil, *kalā matāl*, a black fertile soil found in low levels, and *nuniā matāl*, a soil of a bluish-white colour, found near the Chilkā lake, which becomes saltish in the hot weather.

The main portion of the Khurdā subdivision is hilly, but it includes a narrow alluvial strip varying in width from one to three miles, and *zilās* Balabhadrapur and Mughalbandi are entirely deltaic. In *zilās* Khurdā and Rāmeswar, and in part of Dāndimāl, there are extensive beds of laterite; but the valleys of *zilās* Dāndimāl, Khurdā, Tapang, Rāmeswar and Kuhuri, and those in the northern portion of Bānpur, are chiefly composed of recent alluvium, consisting of red and brown clays, white, brown and red loams, with more or less sand, detritus and vegetable moulds; here and there ridges or beds of old alluvium, containing nodular limestone (*genguti*), form the sub-soil, and this alluvium is found in large areas in *zilās* Pānchgarh and Kuspallā, as also in parts of *zilā* Bānpur. A portion of the Chilkā lake is comprised within the subdivision, and along its

shores are large tracts composed of recent deposits, while the valley of Bānpur, extending down to the lake, is composed principally of black Chilkā soil. The soil of this valley has been enriched and modified by the silt brought down by the Saliā, a small river which flows through a densely-wooded and hilly country. Wherever the waters of the Saliā can be taken for irrigation, the soil has become extremely fertile, and yields rich crops of every description. Speaking generally, the soils of Khurdā formed of detritus of metamorphic rocks, sandstone and vegetable mould, are for the most part fertile. The great desideratum, however, is water, and if there is a sufficient supply of the latter, even a few inches of soil on the beds of laterite, which cover an extensive area at varying depths, can produce a fine crop of paddy. If, however, the rainfall is insufficient or unseasonable, the paddy rapidly withers and dies.

IRRIGATION.

Artificial irrigation is carried on from several sources, *viz.*, (1) from the large rivers through embankment sluices; (2) from rivers by means of water-lifts; (3) by damming up natural streams; (4) from tanks; (5) from natural springs; and (6) from wells. Of these sources, irrigation from natural streams is the most important, but unfortunately the streams, with one or two exceptions, are not perennial, and cannot be of much use for irrigation, unless the surplus water is stored in suitable reservoirs during the rains. Wells form the least important source of supply; they are but little used, only a few fields of sugarcane or country potatoes (*sāru*) being watered from wells dug yearly for the purpose. Properly speaking, there is no perfect system of irrigation in the whole district. A system of irrigation to be of real value should afford means of irrigating the fields whenever water is needed for the crops, *i.e.*, the source of supply should be perennial, or the supply should be drawn from some reservoirs where water can be stored up to meet the emergency of a drought. But, with the present system of irrigation, there is no command over the source of supply.

In the hilly tracts which form the Khurdā subdivision the natural sources of water-supply are the rainfall and the perennial springs issuing from the jungle-clad hills. These natural sources are inadequate for the requirements of cultivation and are supplemented by tanks, and by utilizing the water of the numerous nullahs and streams. When the latter method of irrigation is employed, dams (*bāndhs*) are put across natural streams, and the water being thus headed up either flows over the cultivated area or is led to the fields by means of small natural or artificial

channels, locally known as *pahanis*. Tanks are of two kinds. Some are tanks of the ordinary kind made by excavation, which are occasionally fed by natural springs. Others are formed by constructing embankments across sloping land, so as to intercept the drainage of the land above. Sometimes they are artificially deepened by excavation to increase their capacity, and sometimes they are fed by natural springs; they are known locally as *garhiās*. Perhaps the most valuable tract in the Khurdā estate is the area irrigated from the Saliā river in *silā* Bānpur, but even there, if the rain fails in the basin of the river during the *beusan* season, the harvest is lost. This remark, however, does not apply to irrigation from some perennial springs, such as the spring feeding the Kajla Ganda *bāndh* in Mahāl Mujna near Khurdā and the springs near the Bārunai hills.

In the headquarters subdivision the chief sources of irrigation are the rivers, from which in times of flood water is let out into the cultivated land through embankment sluices. The defect of this system of irrigation is that the crops suffer from drought, if there are no floods in the rivers. In the minor drainage channels also earthen dams are thrown across the stream so as to head up the water, which thus irrigates the fields lying close to them; but this is done to a very limited extent. Some irrigation is carried on by means of water-lifts, mainly in the case of *dālua* crops, but there are also some hot-weather crops irrigated in this way along the banks of the rivers Dayā and Bhārgavī, and some sugarcane cultivation on the banks of the Ganguā near Bhubaneswar.

Water-lifts. The three commonest contrivances for raising water from a lower to a higher level are the *tendā*, *senā* and *jantā*. The *tendā* consists of two upright posts with a cross bar, which serves as a fulcrum on which a bamboo pole works; the latter is weighted at one end by a stone or mass of mud, and at the other a thin bamboo is fastened, with an earthen pot or bucket attached. When water is required the cultivator pulls down the bamboo pole till the bucket is immersed: as soon as the tension is relaxed, the weight attached to the lever raises the bucket of itself, and the water is then emptied into a *nodhā* or pipe, which is generally the hollowed trunk of a palm-tree, and is directed into the fields. When the field is any considerable height above the water, a platform is built on four stout bamboos on which a man stands to work the lever.

Where the water has only to be raised a few feet, it may be scooped up in a *senā*, a sort of basket made of split bamboo which two men use. Holding the ropes attached to either side, they

swing it backwards, and bringing it down sharply into the water carry the forward motion of the swing through, until the *senā*, now full of water, is raised to the level of the water-channel, when the contents are poured out.

Another way of lifting water a short distance is with a scoop, called the *jantā*, which is made of a single piece of wood about 6 feet long, hollowed out and shaped like one-half of a canoe, the broad open end of which rests on the head of the water-channel. The pointed closed end dips into the water, and when this is raised, the water pours naturally into the channel. It may be worked by one man either directly or with the help of a bamboo crane and counterpoise, as is done with the *tendā*, but it cannot lift more than a couple of feet. It is not uncommon for two of these methods to be combined, the water being lifted by the *tendā* into a reservoir, and from that into the water-channel by a *senā* or *jantā*.

The following table shews the normal acreage of the crops grown in Purī and their percentage on the normal net cropped area:— PRINCIPAL CROPS.

Name of crop.	Normal acreage.	Percentage on normal net cropped area.	Name of crop.	Normal acreage.	Percentage on normal net cropped area.
Winter rice ...	548,700	77	Summer rice ...	9,300	1
Sugarcane	3,100	...	Gram	4,400	1
Total *Aghani* crops	551,800	77	Other *rabi* cereals and pulses	65,300	9
Autumn rice ...	65,200	9	Other *rabi* food-crops ...	1,400	...
Māndiā	24,800	3	Linseed ...	900	...
Indian-corn ...	200	...	Rape and mustard	2,900	...
Other *bhadoi* cereals and pulses ...	1,500	...	*Til* (*rabi*) ...	600	...
Other *bhadoi* food-crops	3,200	...	Other oil-seeds	4,000	1
Early cotton ...	2,300	...	Tobacco ...	1,600	...
Til (*bhadoi*) ...	700	...	Late cotton ...	400	...
Other *bhadoi* non-food crops.	2,100	...	Other *rabi* non-food crops ...	200	...
Total *bhadoi* crops	100,000	14	Total *Rabi* crops	91,000	13
Forest	310,691	43	Orchards and garden produce.	45,100	6
Twice-cropped area	73,200	10			

These figures will sufficiently shew how greatly rice predominates to the exclusion of other miscellaneous crops known as *bāzefasal*.

Rice. There are many varieties of rice grown in the district, but they may all be classified under three main divisions, corresponding to the different seasons of the year, viz., *dālua* or summer rice, *biāli* or autumn rice, and *sārad* or winter rice. In some tracts *laghu* rice is regarded as a fourth class, but for practical purposes it may be considered an early variety of *sārad* rice. The growth of these different classes of rice varies according to locality. The northern portion of the headquarters subdivision, where the level of the land is comparatively high and more or less free from inundation, is suitable for the cultivation of *biāli*, *laghu* and medium *sārad* rice; while the southern portion, which is on a lower level and more subject to flood, is cultivated chiefly with the heavier *sārad* and *dālua* rice.

Generally speaking, winter rice is the principal crop throughout the Purī subdivision, but the most striking preponderance is in the *parganas* of Sirai and Chaubiskud, which grow least *biāli*. The proportion of *sārad* is lowest in Oldhār, which contains extensive *dālua* lands, and in Paschimduai, where there are larger *biāli* and pulse-cropped areas. Early rice predominates in the *parganas* containing high land, which are protected from inun tion; it is grown least in the flat low-lying tracts near the lo reaches of the rivers where they enter the sea and the Chil Spring rice is grown in very small areas except in *parga* Oldhār, Mātkatpatnā and Rāhāng. Oldhār *pargana* includes Sar lake, a large portion of which is cultivated with *dālua* in t winter months. In Mātkatpatnā the presence of the Kushbhad river enables some *dālua* lands to be irrigated up to February o March, after which date the river becomes tidal. In Rāhāng *dālua* is grown chiefly on the Samang Pāt, a large expanse of low-lying country north of Purī town, which is flooded annually from the Bhārgāvī through the Dhanuā, East Kania and Athāra Nullah escape channels.

In the Khurdā subdivision the main crop grown is *sārad*, which occupies 85 per cent. of the cultivated area; and it is only in the extreme north that there is any considerable area under *biāli* rice. *Dālua* rice is also unimportant, being confined almost entirely to *zilās* Dāndimāl and Rāmeswar, where alone there is low-lying marshy land suitable for its cultivation. The tendency in this subdivision is to grow *sārad* even on uplands unsuitable for its growth, which however would yield excellent harvests of *biāli* rice; for the latter crop, being reaped in September before the rains have ceased, has a better chance in terraced fields on high land than *laghu* or early *sārad*, which is reaped in November and depends largely on later rains.

Sārad rice consists broadly of three classes, *bara*, *majhilā* and *laghu*, the distinction between the three depending mainly on the amount of water that each variety requires. *Bara dhān* is sown on land where most water is obtainable, such as low lands and old river beds, and is reaped in December and January. *Majhilā* is grown on land where there is less depth of water, and comes to maturity earlier than the *bara* variety, being reaped in November or December. *Laghu* requires less water again than *majhilā*, and is therefore sown on higher lands; it is reaped in September or October. In some cases *laghu* is sown on *biāli* land after that crop has been cut, if the tenants see that there is sufficient water on the land. **Sārad.**

Sārad rice is, for the most part, sown broadcast, but is transplanted if the seedlings have been destroyed by flood or early drought. Ploughing begins as soon as the first shower of rain falls after the harvesting of the previous winter crop and is continued until the end of May. The land is ploughed as often as the weather and the resources of the cultivator permit, but as a rule four or five ploughings are considered sufficient. The soil, after being turned up, is exposed to the action of the sun and wind, and lands lying beyond the reach of the fertilizing river silt receive a dressing of manure, mainly cow-dung and mud. The peasant then waits for the showers which usher in the monsoon, and starts sowing as soon as they appear in May or June. The plants germinate in 15 days, and consequently the earlier the seed can be sown, and the stronger the young plants are when the rains set in, the better is the chance of a good crop. During the latter half of June and the first half of July, the growth of the rice is helped by the monsoon rains, and the cultivators have little to do but watch the young plants growing up, mend the small ridges round the fields, and do similar odd jobs.

During the rest of July, when the plants have attained a height of about 15 inches, the important operation called *beusan* (literally changing of place) is performed. This consists of driving the plough through the young rice in order to thoroughly loosen the soil at their roots; the rice plants are then firmly replanted by hand, and a sort of blunt harrow is drawn over the field to level and consolidate it. *Beusan* is performed about a month after sowing, when there has been enough rain to soak the land thoroughly and leave some water on the top. It is considered of great importance that this operation should be performed as soon as possible after the plants are well above ground, and it is regarded as a sign of a bad season if it cannot take place by the end of July. ***Beusan.***

After *beusan* is over, the ridges enclosing the fields are strengthened, the grass cleared away from them, and the weeds removed. For these operations an ample supply of water is necessary, and if this is available and there is sufficient rainfall in September and October, a good harvest is secured in the cold weather months.

Biāli. *Biāli* rice is sown broadcast on high lands, the richest yield being obtained from the fertile soil called *kalāmāti* in the vicinity of village sites. It is also raised on riverside land, but is precarious there, as it is liable to be destroyed or damaged by floods. Ploughing begins with the advent of the rains, and sowing should be finished early in June. Abundant rainfall within 8 to 15 days after sowing is essential, as otherwise the crop is materially injured or entirely lost. It is ready for cutting in August or September, leaving the land free for *rabi* crops, such as *bīrhi*, *kulthī*, etc. *Biāli* rice is also known as *sāthikā* from its taking 60 days to come to maturity.

Dālua. *Dālua* or spring rice is grown mainly in the marshy *pāts* in the south of the headquarters subdivision. Some villages in *pargana* Rāhāng are almost entirely under this crop, as they are annually inundated; it is also raised in a few villages to the north, where the land is low-lying or advantage is taken of a small marsh or shallow tank. In the Khurdā subdivision its cultivation is restricted to [illegible] water or are capable of being irrigated [illegible] showers begin. It is occasionally [illegible] requires marshy lands [illegible] rule, is sown broadcast. It is sown as [illegible] leaves the land sufficiently to allow of its transpla[illegible] and the date of sowing therefore varies with [illegible] of the ground and the rainfall or flood of the preceding s[illegible]. Generally speaking, however, sowing takes place in January, and the crop is reaped in April.

Other cereals and pulses. After rice the most important cereal is *māndiā* (Eleusine coracana), which is grown on a normal area of 24,800 acres. It is a valuable grain, as it is largely consumed by the poorer cultivators in years of scarcity, and not infrequently also in ordinary years when their food stocks run short. Other cereals and pulses, such as *chīna*, *kulthī*, *bīrhi* and *mūga*, account for 9 per cent. of the normal cultivated area. *Chīna* (Panicum miliaceum) is a cereal grown, as a rule, on low-lying *sārad* land; it is sown in December and harvested in March. *Kulthī* (Dolichos biflorus) is a cheap pulse sown in October or November and reaped in February or March. It is raised on land from which a crop of early rice has been removed, on riverside lands, and round

village sites. *Bīrhi* or *kalai* (Phaseolus radiatus) is another pulse grown during the same period on high lands. *Mūga* (Phaseolus mungo) is a cheap pulse sown in January or February and cut in March and April; it is grown in large quantities on paddy lands of a medium level.

Oil-seeds and fibres. Oil-seeds are unimportant crops in Purī, rape and mustard being grown on a normal area of only 2,900 acres and other oil-seeds on 4,000 acres. Linseed, mustard and the castor oil plant (*gaba*) are grown mainly on river banks and round village sites. Cotton is raised on an even smaller area, the normal acreage of early cotton being only 2,300 acres and of late cotton 400 acres.

Sugarcane. Sugarcane, with a normal area of 3,100 acres, is grown practically all over the district. It is a crop requiring high land with good soil and facilities for irrigation, and is frequently found on riverside lands, in the vicinity of village sites, and near tanks. It is an exhausting crop and is consequently rotated with other crops. The cane is pressed by a press called *khāi*, a primitive contrivance consisting of two wooden rollers revolving round another central roller.

Dyes, tobacco and *pān*. Indigo is grown in small patches in the headquarters subdivision, being found chiefly in *parganas* Kotdesh, Antrodh, Kotrāhāng and Dāmarkhand; the normal area is only 700 acres. Tobacco is raised on riverside lands, which periodically receive a deposit of silt. The tobacco grown is for the most part consumed locally. *Pān* is grown in small quantities on the high lands of a few villages. The chief centre of *pān* cultivation is Narsinghpur, which has given its name to a variety called Narsinghpurī *pān*, which has gained some popularity in the Calcutta and Cuttack markets. Other *pān* gardens are found in *zilā* Dāndimāl and in the headquarters subdivision close to the Jagannāth road, the *pān* being sold to pilgrims and exported to Purī.

FRUITS AND VEGETABLES. The principal fruits of Purī are the mango, jack, papaya, custard-apple, pine-apple and plantain. Of these fruits the most important is the mango, which forms an important part of the food supply of the people. The Khurdā subdivision is specially noted for its numerous mango and jack groves, which have been estimated to extend over nearly 30 square miles; besides these regularly planted trees, there are a large number of wild trees scattered through the jungle or growing on the hills. The laterite soils common in this tract seem to be specially suited to the growth of mango trees, which on such soils often attain a remarkable size. The fruit they yield is of every

variety and colour, varying from a large sweet and fibreless fruit to a small berry-like fruit with stringy flesh, a large stone, and a strong flavour of turpentine. In the Māls there is a variety of wild mango, yielding a small but often sweet and tasty fruit. The jack fruit is generally of the common stringy variety, though sweet and often of large size. The tamarind tree replaces the mango in tracts where the old undulating alluvium predominates; and on that soil, which is unsuited to the mango, thrives and grows to a great size. The common custard-apple, *jāma*, *bel*, *lankā-āmba*, limes, and citrons are cultivated to a limited extent. The orange tree, which succeeds in Ganjām, will only yield fruit in the Bānpur Māls. Coconut and date palms thrive in Bānpur, and the latter also do well in Pānchgarh, Mānikagorā and other places. Among other fruit-bearing trees may be mentioned the *polāng* tree, which is grown extensively for the sake of the oil from its berries. Many vegetables are grown on riverside lands and on the land adjoining the village homesteads, including brinjals, cucumbers, radishes, gourds of several kinds, sweet potatoes, yams and beans.

EXTENSION OF CULTIVATION.

According to the agricultural statistics of 1906-07, altogether 1,132 square miles are under cultivation, forests account for 485 square miles, while 493 square miles are unculturable, and the area of culturable waste other than fallow is 194 square miles. The information available shows that there has been a very great extension of cultivation within the last half century. Since the settlement of 1837 the area under cultivation in the headquarters subdivision has increased by 23·4 per cent. owing to the reclamation of waste land; and in the Khurdā Government estate there has been an increase of 24,816 acres, or 39 square miles since the settlement of 1882.

In the headquarters subdivision the advance of the plough has been steady, except in its north-western extremity, where the physical features of the country have proved an effectual obstacle to such extension. There are also a few tracts in which a considerable area has been thrown out of cultivation owing to floods. In Khurdā the jungle is being cleared steadily in places where the soil is suitable, and it is believed that, if proper means of irrigation could be provided, still larger areas might be reclaimed. A noticeable example of such reclamation may be observed in the case of some villages near Nīlādriprasād. Once a rich and thriving estate, it was devastated during the wars between the Rājas of Khurdā and Pārikud; the land relapsed into jungle, and no attempt was made to bring it again under cultivation. But [illegible] years ago these villages were given out in lease with the

object of reclaiming the land; means of irrigation were provided; and the result has been that more than half of the area leased has been brought under cultivation.

The most marked improvement in agricultural practice during the last half century has been the gradual decline of the shifting system of cultivation, known as *toilā*, which was formerly practised on a large scale by the aboriginal inhabitants of the Khurdā subdivision. This consists of a rough method of cultivating newly cleared patches of land in upland tracts. The jungle is cut down and burnt upon the spot; and the soil, thus enriched with salts, yields abundant crops of early rice, oil-seeds and cotton. At the end of four or five years such clearings are abandoned for new ones, and the land relapses into jungle. When a fresh growth has sprung up, the trees and scrub-wood are again cut down and burnt on the spot, the whole process of clearing and cultivating being renewed. Of late years the extension of cultivation has considerably reduced the area of forest and waste land, which in former days was looked upon as only fit for *toilā* cultivation, but has now been brought under the plough. In other respects, however, there has not been much advance. In spite of the efforts made in the Khurdā Government estate to introduce new crops and new varieties of seed, the cultivator still remains constant to the ways of his forefathers.

IMPROVEMENT OF METHODS.

Toilā cultivation.

Manure, consisting chiefly of cow-dung, is used to a large extent in the headquarters subdivision; this is eked out by mud from the bottom of tanks and river deposits, and the refuse of oil-seeds and sugarcane is also used. In the Khurdā subdivision the artificial manure almost exclusively used is dried and powdered cow-dung. The droppings are collected from the cow-sheds and kept in pits. The urine, as a rule, is allowed to escape, but a portion is collected with the scrapings of the mud floor, which are added to the manure pit. The manure is kept for seven or eight months until quite decomposed; it is then placed in heaps on the field just before the May ploughings. Other artificial manures are but little used, but for some miscellaneous crops, such as sugarcane, a certain quantity of oilcake is employed. Green crops or jungle growth are not used as vegetable manure, although there are large quantities of suitable plants, such as the smaller cassias and wild indigo. A certain manurial value is obtained, however, from the weeds ploughed into the soil, and from the rice stubble, which is ploughed in immediately after reaping. One of the finest manures which the Khurdā rice lands now enjoy is the water, impregnated with salts and loaded with vegetable detritus, which flows into them from the adjoining hills.

Manures.

CATTLE. The cattle of the district are similar to those found in the south of Bengal, and no description of them is required. Cows, buffaloes and oxen are kept by the pastoral caste of Gauras and by cultivators generally, sheep and goats by low castes, and pigs by the degraded caste of Ghusuriās. A few country-bred ponies are kept by the well-to-do for riding.

Pasturage. In the headquarters subdivision an area of 21,400 acres, representing from 3 to 5 per cent. of the total area of the villages, was set apart at the last settlement for grazing grounds. The procedure adopted is described as follows by Mr. Maddox:—"With two objects in view, the establishment of fuel and fodder reserves, and the setting apart of specific places for sanitary purposes, the Settlement Officer caused all waste lands and tanks, to the use of which the villagers appeared to have a customary right, to be recorded as the property of the community (*sarba sādhāran*). Such lands were found in most villages, though the right was, by no means, always admitted by the zamīndārs. . . In the rules of 1896 provision was made for the reservation of lands for grazing grounds with the consent of the zamīndār, and the Assistant Settlement Officers were directed to select in each village a few large fields, not more than 15 to 20 acres in an average village of 400 acres, suitable for grazing, and to enter them in a separate *khatiān*, to which they were required to get the signatures of some of the leading ryots and of the zamīndār, or sub-proprietor, or his agent. A note was then made in the *khatiān* that the village community were entitled to graze their cattle without charge on this land, and that it was on this ground exempted from assessment. To safeguard these lands against subsequent encroachment, a clause has been inserted in the form of *kabuliyat* to be executed by all zamīndārs and sub-proprietors entering into engagements for the payment of revenue, binding them to preserve as grazing grounds, cremation grounds, and reserved tanks, the plots specified, to take no rent or grazing charge, and to take action in the Courts to eject trespassers, if required by the Collector to do so." These areas were set apart after calculating the approximate number of cattle in a village, and if the lands are maintained intact, no difficulty should be experienced by the villagers in obtaining sufficient pasturage for their cattle; but unfortunately this has not proved to be as efficient a safeguard as was expected.

In the Khurdā subdivision the cultivators depend mainly on the protected forests for pasturage, *i.e.*, on the lands not included in the reserved forests or in the holdings of the ryots. Elsewhere in Orissa the rice fields form a valuable pasture ground, the stubble, weeds, and grass being intentionally left for fodder; but in

Khurdā, in order to convert the stubble and other vegetable growth into manure, the fields are ploughed immediately after reaping from November to January, so that, with the exception of a scanty herbage on the *ails*, next to nothing springs up in the fields before ploughing recommences in May for the new crop. Under the rules laid down, the tenants are allowed to graze free of charge one pair of bullocks and 5 cows for every 4 acres which they hold in the Government estate. Cattle in excess of the prescribed number are charged for at the rate of 8 annas for each buffalo, 4 annas for each bullock, cow and yearling calf, and of 2 annas for each goat and sheep per annum. From enquiries made at the last settlement it appears that the area available for grazing, even if it could be equally distributed over the whole estate, is not sufficient for the number of cattle. As a matter of fact, the distribution is unequal, and in many villages the pasturage is probably less than is actually required.

CHAPTER VIII.

NATURAL CALAMITIES.

LIABILITY TO NATURAL CALAMITIES.

THE district of Purī is liable to suffer both from floods and droughts. The former are due to the sudden rising of the rivers, which have one common characteristic. In the hot weather they are nearly dry, and their beds consists of stretches of sand, through which small streams meander from bank to bank. But in the rainy season they rise to a great height with wonderful rapidity and bring down a large volume of water, which the lower channels are unable to discharge. The result is that the water spreads over the country except where it is checked by embankments. Droughts are due to the deficiency of the rainfall. In most years the rainfall is sufficient for the needs of the district, but it is precarious, and its early cessation is fatal to the rice crop, on which the people depend. Practically the whole of the cultivated area is under rice, and other crops are scarcely grown at all. By far the greater part, moreover, of the rice crop consists of *sārad* or winter rice, and the autumn and spring rice are comparatively small crops; they are not grown at all in some parts, and can nowhere make up for the loss of the winter rice.

FAMINE OF 1866.

The greatest famine within the memory of the inhabitants of Purī was that of 1866, which was felt with even greater intensity in Purī than in either Cuttack or Balasore. The outturn of the rice crop of 1864 had been short, and this was followed by an utter failure owing to the scanty rainfall in 1865, when only 36·3 inches fell, of which not more than 5·2 inches fell in September, and none at all subsequently. In October 1865, prices were about two and a half times their ordinary rates, and distress began to appear, the people in many places subsisting on fruits and roots, while rice was selling at famine rates. The Collector applied early in the season for permission to make enquiries into the losses on the zamīndāri estates, but his request was summarily refused by the Board of Revenue. A more pressing application to the same effect was made at the end of November, but was again negatived, and the Collector was informed that no remissions were to be granted, and that no hopes of receiving

any aid should be held out to the zamīndārs. On the 25th November he telegraphed that starvation was occurring in Pārikud and Mâlud, that the number of deaths was increasing, and that general destitution prevailed. Relief works for the employment of the distressed were sanctioned; and a definite scheme for road-making on a large scale was submitted by the Collector, who recommended that wages should be given in food, insetad of in money, and that grain should be imported and stored for this purpose. Grants were made for works on the Cuttack-Madras road and the Cuttack-Purī road, but Government rejected the proposal that wages should be paid in kind.

In January 1866 it became clear that rice was not procurable in any quantity, and the Collector called attention to the necessity of providing a supply of food for the labourers; but his request for an advance with which to purchase rice was refused. The Commissioner then telegraphed:—"Famine relief is at a stand-still. Purī must get rice from somewhere. May I authorise advance for this purpose?" The reply sent was:—"Government declines to import rice into Purī. If the market favours importers, rice will find its way to Purī without Government interference, which can only do harm. All payments for labour employed to relieve the present distress are to be in cash." The result of this telegram seems to have been to put an end to the discussion regarding the importation of rice till a period when the weather and the state of the people rendered it too late to import it with successful effect. No further orders were issued on the subject till June. In the meantime, the Collector did all that he possibly could, but there can be no doubt that the relief works were rendered to a great degree inoperative from want of rice to feed the labourers.

Matters grew rapidly worse, and in the early part of May the distress in the town of Purī had become so great that it was no longer possible to leave it to the unorganized charity of the *mahants* or heads of religious houses. On the 9th May the Collector, as Secretary to the Famine Relief Committee, made an appeal to public charity through the Calcutta Press. A sum of Rs. 1,000 was sent in answer to his appeal, and this enabled him to open a relief house in the town, at which cooked rice was supplied. At the end of May a grant of Rs. 10,000 was made by Government to the Committee, and an officer was appointed to superintend the distribution of gratuitous relief in the interior. By this time some private trade had sprung up with the south, rice being imported by way of the Chilkā lake from Gopālpur; but the supply was dependent on the imports from ports still further south.

In the middle of June there was a cessation in the imports, in consequence of the non-arrival of a ship which had been expected at Gopālpur, and the Collector reported that rice was scarcely procurable even for the prisoners, and called on the Commissioner to send him a supply from the rice which had been sent by Government to False Point in order to avert a crisis.

The selling price in Purī at this time was below 6 standard seers to the rupee; but by the end of June there was a renewal of the supply from the south, and the price then fell to 7¼ seers for the rupee. Government had, meanwhile, abandoned its resolution not to import rice, and imported 2,549 bags, which reached Purī on the 30th June. The Collector began to make sales of rice to the public in the town at the rate of 6 local seers (7⅞ standard seers), and then was forced to raise the price to 5 seers for the rupee, which had the effect of stopping the sales for a time. On the 7th July another steamer arrived in the roadstead with a cargo of 12,476 bags, but the bad weather had now set in, and it was with the utmost difficulty that the grain could be got on shore at the rate of a few boat-loads a day. At times it was absolutely impossible to go off to the ship at all, and altogether 7 weeks passed before the whole of the 12,476 bags were landed. Moreover, a brig, which had brought up 1,500 bags of rice for Gopālpur on private account, was eventually obliged to leave the port without discharging her cargo.

This period was one of very great distress throughout the district. The quantities of grain which the authorities were able to land at Purī from day to day were so small, that there appeared to be no hope of carrying on the relief operations without a break. On the 20th July rice was selling in the market at less than 6 seers for the rupee, and the Collector was compelled to restrict his sales at market rates to one rupee's worth to each applicant in the town, and on the 13th August it was found necessary to stop the sales altogether for a time. The Relief Committee were still able to keep their relief centres in operation, but the distress was aggravated by the disastrous inundation described later in this chapter.

On the 31st August, another vessel arrived with 7,453 bags of rice, and during September operations were rapidly extended, the shopkeepers being employed as agents for the sale of the Government rice throughout the district. Rice from Gopālpur also began to come into the district on private account, but on the 10th September the Committee recorded that the class whom they had hitherto allowed to purchase rice at 16 seers for the rupee, had

merged into the pauper population, having sold all that they possessed. They therefore discontinued sales altogether, supplying the destitute gratuitously, and leaving those who could pay to purchase at the Government shops. In October another dearth of the rice stock took place, which compelled the Collector at first to reduce his sales at market rates by only allowing purchasers to take 8 annas' worth instead of one rupee's worth at a time, and afterwards to put a stop to sales altogether. The Relief Committee, however, had stocks in hand, and were enabled to carry on operations at all their centres, with the assistance of 15,000 maunds of old unhusked rice supplied to them by the *mahant* of one of the *maths*. Further stores of rice were imported in November and the reopening of Government sales, together with the appearance of the new rice in the market, had a marked effect on prices. Coarse rice, which on the 1st November had been selling at $7\frac{7}{16}$ seers per rupee, rapidly fell in price, till on the 23rd the rate stood at 21 seers for the rupee. The condition of the people had much improved by this time, and it was decided to close the centres gradually, but in certain tracts which had suffered more severely than others, it was found necessary to continue gratuitous relief for several months longer.

The previous failure of the crop of 1864, the drought of 1865, and the terrible inundations in August 1866, all combined to make the famine more severely felt in Purī than in any other district. In the south and north-east scarcity had become famine some months earlier than either in Cuttack or Balasore; but unfortunately no rice was imported till a month later than to Cuttack. Certainly, private trade was importing something from the south, but not to anything like the extent of adequately supplying the wants of the people in the interior. By June the famine had reached its height, and it continued unabated throughout July and August. The mortality reached its culminating point at the beginning of the second week of August during the heavy rain and storms which preceded and caused the floods. The people were then in the lowest stage of exhaustion; the emaciated crowds collected at the feeding stations had no sufficient shelter, and the cold and wet killed many. A number of deaths were also due to the fact that, at the centres in the interior, relief was given in the shape of uncooked rice till the end of July. But, as in other districts, it was found that the paupers, having no facilities for cooking it, and famishing with hunger, devoured the rice raw, which brought on fatal bowel complaints. The raw rice was

also forcibly taken away from the weak by the strong, and this led to the distribution of rations of cooked rice. Regarding the mortality, it is impossible to form any estimate which can be confidently pronounced even to approximate to the truth; but in October 1866 it was reported that 210,866 deaths had occurred in the year, and of these a large proportion must have been directly due to the famine.

Famine of 1897. Scarcities have since occurred in 1877-78, 1885-86 and 1888-89, serious distress being caused in the year last named by floods, which injured or destroyed the autumn rice crop and seriously diminished the outturn of winter rice in the Khurdā subdivision and a small tract of country between the Chilkā lake and the sea. Famine once more visited the district in 1897 as the combined result of floods and drought. All the great rivers rose almost simultaneously to nearly the highest point on record, overflowing their banks or breaching the embankments. The low lands were submerged and owing to the unprecedented duration of the flood, remained water-logged for more than a month. Not only was the crop ruined, but much land was permanently thrown out of cultivation by deposits of sand. The cultivators, on the subsidence of the floods, replanted as soon as possible, but the new sowings were sacrificed to drought, as the old ones had been to flood. The drought was also of long duration, the rains having ceased at the end of September. The result was that in some places the rice crop failed entirely, and in others the outturn was not good, while the winter rice crop, which is the mainstay of the people, suffered most from both flood and drought.

Relief measures were necessary in 365 square miles, containing 102,000 souls, the area and the population affected being respectively about one-seventh and one-ninth of the total area and population of the district. The affected area moreover did not form a compact tract, but was scattered in both the subdivisions of the district; nor did all the tracts require relief to the same extent and at one and the same time. There were seven such tracts. The first and most important one was round the Chilkā lake and comprised the *parganas* of Bajrakot, Mālud, Pārikud, Andhāri, Mānikpātnā and parts of *parganas* Chaubiskud and Sirai in the headquarters subdivision and *parganas* Sātparā and Balabhadrapur in the Khurdā subdivision. From its geographical position and physical conditions, this tract, which measured 231 square miles and contained 74,000 souls, is most exposed to the calamities of the seasons. It was here that relief measures were necessary in 1877-78, 1885-86 and 1888-89

subsequent to the great Orissa famine; and it is no matter of wonder that it suffered severely from the unusual floods and drought of the year 1896-97. The second, third and fourth tracts were in the Khurdā subdivision. The second tract comprised *zilās* Rāmeswar and Kuhuri on the shore of the Chilkā lake; its area was 20 square miles, and its population 10,000 souls. The third tract lay at the foot of the Solāri hills extending from the Ganjām Trunk Road near Sunākhalā to Ailpur; the area of this tract was only 9 square miles, and its population 2,000 souls. The fourth tract extended from the Chilkā to the foot of the Solāri hills; it measured 14 square miles, and contained 3,000 souls. All these three tracts suffered equally with the first tract; but the distress was not so great in the remaining three tracts, which were also in the Khurdā subdivision. The fifth tract comprised the Sāna Māls and Bara Māls in Bānpur, measuring 58 square miles, with a population of 2,000 souls; it is of a different nature from the others, being covered with extensive jungles inhabited by aboriginal tribes. The sixth tract was in Kuspallā, near Bāghmāri, with an area of 10 square miles and a population of 4,000 souls. The seventh and last tract measured 23 square miles with 7,000 souls, and lay in *zilās* Khurdā and Dāndimāl on the right bank of the Dayā river.

The period of relief was not the same for all the affected tracts. It was called for as early as February 1897 in the first four and the seventh tracts, and was continued till the 15th September 1897 in the first tract, and till the end of July in the other four tracts. In the fifth and sixth tracts it was only necessary to have relief works from the middle of May and April respectively till the 19th June following. The aggregate number of persons employed on relief works, reckoned in terms of one day, was 519,301, the average daily number being 2,598; the corresponding numbers of those receiving gratuitous relief were 27,853 and 236.

FLOODS.

River floods.

The floods to which Purī is liable are due to the fact that the river channels can only carry off a small portion of the flood water which enters the district, mainly through the Koyākhāi. Such floods, however, are limited to certain portions of the district, chiefly in the headquarters subdivision; and only a small part of the Khurdā subdivision is liable to suffer from inundation. The latter subdivision is divided by the Ganjām road into two portions, which are entirely distinct in character. The western portion is high and undulating, containing tracts of jungle alternating with villages and cultivated low lands, and the damage done by floods is very slight: indeed, some of the higher

lands are benefited rather than injured by high floods. The portion of the subdivision to the east of the Ganjām road is in a very different position, for it is subject to annual inundation from the Dayā river. The headquarters subdivision is also divided into two tracts, viz., the western or protected area between the Dayā and the Bhārgavī rivers, and the eastern or unprotected area between the Bhārgavī and the sea, which is traversed by the Kushbhadrā river. The former is called the protected area, because it has been decided to keep up the left embankments of the Dayā and the right embankments of the Bhārgavī, so as to protect this area from floods. It is doubtful whether this does much good in the long run. The country protected from floods becomes a sort of a hollow in course of time, while the country outside rises with the deposit of silt, and the time eventually comes when the embankments burst or are abandoned, and the low country suffers more than the surrounding higher lands.

The tracts liable to inundation in ordinary years have been grouped by Mr. H. McPherson, the Settlement Officer, as follows:—(1) the West Dayā tract, including West Lembai, West Sirai, and Balabhadrapur in the Khurdā subdivision; (2) the Dhanuā basin, including the greater portion of *parganas* Purbaduai, Oldhār, Mātkatpatnā and a small portion of *parganas* Kotdesh and Rāhāng; (3) the Samang Pāt, north of Purī; (4) the land along the lower reaches of the Kaduā and the Prāchī rivers; and (5) portions of *parganas* Kodhār, Kurilo and Tappā Kanman.

The effects of inundation are most disastrous in the Dhanuā basin, where the water lodges for a longer period than elsewhere, on account of the inability of the Kushbhadrā to discharge its volume quickly. The results of inundations in the tract first named are also serious, but the damage caused in the fourth tract is slight, and in the Samang Pāt, which is used for the cultivation of *dālua* rice, inundations are not only beneficial but necessary for the crops. In years of extraordinary flood the only portions not liable to inundation are Kotrāhāng, Paschimduai, East Rāhāng, and South-East Chaubiskud; the rest of the headquarters subdivision is converted into a lake for the time being. The effects are least disastrous in the northern *parganas*, where the slope of the land is sufficient to carry off flood water before irremediable damage has been done; Kotdesh, Lembai, Antrodh, Dāmarkhand and Bānchās may be placed in this category. In the *parganas* further south the crops are liable to be severely damaged, and, in bad years, totally destroyed.

Salt floods. Certain tracts are also liable to inundation by salt water. The rivers of the district, whether they enter the Chilkā lake

or the sea, run dry in the hot weather, and are then liable to have salt water forced up their channels by the action of the tides and the strong breeze which blows from the south for several months of the year. When the rivers are embanked, the tides high, and the breeze strong, the salt water overflows and does much damage to the cultivated fields. The tracts specially liable to this misfortune form a belt of about five miles round the shore of the Chilkā in *parganas* Chaubiskud and Sirai, and the lands situated on the lower reaches of the Kushbhadrā, the Prāchī, the Kaduā and the tidal creeks of the Kodhār block. Fields deeply submerged do not recover their fertility for a period of three or four years, and the crops in these tracts are therefore precarious. For such areas river inundation is highly beneficial, as the saline impregnation gets washed out of the soil by river flood, and the effects of tidal flood are thus counteracted. But for this, many large stretches of country would doubtless lie waste along the shores of the Chilkā lake.

Memorable floods.

The annals of the district shew how great is the loss sustained by the disastrous floods to which it is liable. Of the 32 years ending in 1866, 24 were years of flood so serious as to require remissions of revenue ; and during the last 15 years of this period there was only a single one in which such remissions were not required, this exceptional year being 1865-66, when the Province suffered from drought instead. In these 15 years the remission of land revenue due to flood alone was over 4 lakhs, while 3½ lakhs were expended by Government on embankments and other protective works, the two items representing an annual charge of 10 per cent. on the total land revenue of the district. The years 1872, 1892 and 1896 were also memorable for high floods, that of 1892 being remarkable for its severity and that of 1896 for its duration.

Flood of 1866.

But none of these inundations can compare for severity with that of 1866, by which 275 square miles were submerged for from five to forty-five days. Throughout this area the water was nowhere less than three feet deep, in whole villages it was ten feet deep, and over thousands of acres it averaged seven feet. The rivers came down bursting their banks in every direction and leaving fifty-two wide breaches behind them as they tore along. More than 412,000 people were suddenly driven out of house and home, and found themselves in the middle of an inland sea. In one part of *pargana* Sirai, on the north of the Chilkā, 1,200 acres were under nine feet of water, and the average depth over the entire 7,830 acres reported upon in that *pargana* was between seven and nine feet. There were, therefore, in one single

pargana, more than twelve square miles of solid land suddenly turned into a sea between seven and nine feet deep; and this sea continued to cover everything for thirty days. Thousands of miserable families floated about in canoes, on bamboo rafts, on trunks of trees, or on rice stacks, which threatened every moment to dissolve into fragments beneath them. No lives were lost in the first rush of the waters; for the unhappy inhabitants of those regions know but too well, from previous experience, what they have to expect, and live in a constant state of preparation. Most of the hamlets have boats tied to the houses; and for miles, the high thatched roofs are firmly held down by bamboo stakes, so as to afford a refuge in time of flood. Starving colonies might be seen thus perched above the waters. Every banyan tree had its rookery of human beings, while the Brāhmans effected settlements on the roofs of their brick temples, and looked down in safety as the flood roared past. The common danger disarmed all creatures of their natural antipathies. Snakes glided up to the roofs and burrowed harmlessly in the thatch. Others wriggled up trees, and whenever a canoe or log of wood passed, slid down into the water and swam towards the ark which their instinct told them would bear them to dry land. The cattle suffered terribly. Sheep and goats were carried away by herds in the torrent, and in a few days their carcases came to the surface, and floated about covered with crows and scuffling kites. But the most pitiable sight of all was that of the plough cattle standing in shallow parts up to their necks, and hungrily snuffing the barren waters for food until they sank exhausted into the slime. Before the flood was over, many a famished family had also succumbed. When the waters subsided, the survivors found themselves in a region of desolated homesteads, fœtid slime, and rotting crops.

Such was the flood of 1866; and it must be remembered that, although of unusually long continuance, it was by no means singular as to its extent or its depth. Indeed, we find that in 1855 the inundation was deeper in every one of the *parganas* of the district.

EMBANKMENTS. Government maintains altogether 248·87 miles of embankments in this district under Act XXXII of 1855. These embankments afford only partial protection to the area liable to inundation, but the problem of providing complete protection is no easy one. In years of high flood in the Mahānadī river a large volume of water is poured into the district by the Koyākhāi. The chief peculiarity of this river is that it has no large channel leading directly to the sea, and the greater part of the water carried

by it has to pass to the sea through the Chilkā lake. The channels by which the water is conveyed to the Chilkā can, however, in their lower portions carry only about 45,000 cubic feet per second, as compared with 334,483 cubic feet, the estimated discharge of the Koyākhāi near its head in the flood of 1872. It is, therefore, obvious that whenever there is a high flood, a considerable part of the Purī district must become a lake for the time being.

Both civil and engineering authorities are agreed as to the difficulty of remedying this state of affairs and of providing a system which could afford complete protection. Thus, Mr. H. McPherson, who conducted the last settlement of the headquarters subdivision, writes:—"The problem of protecting the district from river inundation is a difficult one. The problem is to conduct a given amount of water from the head of the district to the Chilkā and the sea by channels that reduce to a minimum the chance of danger to the cultivated area. In ordinary years the embanked channels of the Koyākhāi distributaries are equal to the task. In extraordinary years they are unequal to it. The object to be aimed at is to conduct the excess water in directions by which it will do least harm. At present, it is allowed to spill into low-lying areas, where the results are most harmful, while on the other hand complaints are made that where flood water is wanted on the shores of the Chilkā to neutralize the salt impregnations of the hot weather tides, a sufficient supply of river water is not now obtainable."

Again, the Hon'ble Mr. W. A. Inglis, Chief Engineer to the Government of Bengal, writes:—"The chief physical difference between the portions of the delta in the Purī and in the Cuttack districts is the marked difference in the sizes of the channels which have to convey to the sea the flood entering the head of the delta. In the Cuttack district the channels cannot carry the whole of the flood, but they can carry, with the assistance of moderate embankments, a very fair proportion of it, and they reunite near the coast in very efficient estuaries. In the Purī district, on the other hand, the channels can carry such a very small proportion of the flood that any attempt to confine it between embankments is hopeless. Further, the only estuary in the district is the small one of the Kushbhadrā river, and the rest of the flood water has to find its way to the sea through the Chilkā lake, which can hardly be considered as an efficient estuary. It seems possible that the existing state of affairs is of comparatively recent origin, and that at a period more or less remote a large river flowed along the course at present occupied

by the Prāchī Nullah. The existence of a high sandy ridge along the north side of this stream would appear to indicate that formerly there must have been either a large river or that it was the sea shore.

"What at present happens is that with a low or moderate flood part of the district is protected and part is open to inundation, while with high floods the main embankments are overtopped or breached, and only a small portion of the district is protected. To what extent the inundation is, on the average of years, really destructive is a point which, I think, can hardly be said to have been determined, and in the absence of continuous records of the yield of selected tracts it can only be guessed at. The Commission of 1866 arrived at the conclusion that an annual assessment of 8 annas per acre would be a moderate charge for protection, and that, supposing such a rate to be levied, an expenditure of 18½ lakhs might be advisable. Unfortunately, it seems doubtful if even this sum would suffice for works which would reduce the flood volume of the Koyākhāi to such dimensions that it could be controlled within the channels of the district, and at the same time guard against injury from the water diverted to other channels. It is not probable that the Bengal Government will, for many years to come, if ever, undertake the construction of reservoirs on the tributaries of the Mahānadī to store and moderate floods, and generally it would seem that the existing distribution of flood must be accepted, or that at all events it cannot prudently be greatly altered.

"Assuming that any material alteration in the distribution of the flood volume is not probable, it may be as well to consider that policy should be adopted in the maintenance of the embankments in the Purī district. The general question whether embankments are in themselves desirable or otherwise need not be discussed here. We have to deal with a more or less imperfect system of embankments, which, having regard to existing conditions of agriculture, land tenure, etc., cannot easily be altered to any large extent. My personal view is, that we should endeavour to utilize the existing channels for the passage of flood, assisted by embankments, to such an extent that the flood may be as much as, but not more than, 5 or 6 feet above the level of the natural bank. Nature sets us the example in embanking, and I think it is not imprudent to improve on this example, or to go beyond it, to the extent indicated. Having then determined, as has been to a considerable extent already done in Orissa, the greatest volume of flood which has to be passed, and the approximate capacities of discharge of the various channels embanked to a certain extent, it

has to be considered, how the surplus volume of flood is to be dealt with. It appears to me that the most reasonable method is to fix certain places along the banks of the channels which shall be left unembanked, and from which the necessary volume of flood may escape over the country.

"In the Cuttack district this result has been fairly attained, and little appears to be required. In the Purī district what happens now is that on the occasion of every flood of even moderate height, breaches are caused in the embankments, which are filled up again at very considerable cost, while all the time it is perfectly understood that the next flood will again cause the same or similar breaches. This is a most unsatisfactory method of expending money. The only point I can see in its favour is that it offers work to the public who have suffered from the breaches. My view is that it would be much better to remove permanently parts of the embankments at suitable places, to pave with stone pitching the natural bank at these places, so as to prevent deep channels forming, and in this manner to regulate, as far as may be, the inundation which is inevitable, and which has its good as well as its bad points."

It may be added that the policy of providing escapes of this kind in the embankments is gradually being given effect to.

CHAPTER IX.

RENTS, WAGES AND PRICES.

CASH RENTS. CASH rents are paid for the greater portion of the land under cultivation. The rents payable have been recently determined in the course of the settlement operations carried out both in the headquarters subdivision and also in the Khurdā estate. In both areas the settlement took effect from 1897, but in the headquarters subdivision it has been made for a period of 30 years terminating in 1927 and in the Khurdā estate for 15 years terminating in 1912.

Khurdā sub-division. By the settlement concluded in the Khurdā estate, the rents of the ryots, which had been fixed at Rs. 2,68,212 at the settlement of 1882, and had risen to Rs. 2,84,556 during its currency, were further raised to Rs. 3,46,427. The rate of rent assessed was based on that imposed at the previous settlement, an enhancement of 3 annas in the rupee being made in the rents paid for old cultivation, while a rate of 14 annas 10 pies per acre was imposed on new cultivation. The enhancement on old cultivation was granted solely on account of the increase in the price of crops; the assessment on the small area of new cultivation was based on the universally accepted rates of the country. Such newly cultivated land is called *nayābādi* or *tolā;* the latter word means literally unauthorized cultivation or squatting, and is applied to old lands cultivated after settlement and not incorporated in the revenue-roll of the estate. The holders of such land have been entered as non-occupancy ryots.

The net result of the settlement was to increase the rent-roll of the estate by Rs. 61,871, the greater portion of this increase being due to the general enhancement of rents for old cultivation. The general incidence of ryoti rents per acre amounted, however, to Re. 1-10-6 only, as against an incidence of Re. 1-11-7 for the rest of the district. In addition to these rents, the ryots pay half an anna in the rupee for road cess and an equal amount for certain forest privileges. About one-third of the agricultural under-tenants pay on an average Rs. 2-3 per acre as cash rents, and of the remainder half pay mixed produce rents and cash rents; the incidence of the latter has been estimated at Rs. 6-1 per acre.

In the Bānpur Māls the rents fixed were specially light. This tract consists of wild hilly country inhabited by aboriginal Khonds, who were for the first time assessed to rent at the settlement of 1882. The rates fixed were nominal, varying from 6 pies to one anna per *mān*, *i.e.*, 0·45 acre. The rents were payable through the *sarbarāhkārs*, with whom also were settled large areas at 7 pies per acre to be brought under cultivation in the course of the settlement. On its conclusion, the Khonds accepted an enhancement of 3 annas in the rupee on the rents hitherto paid, the result being that the incidence of the new rent payable from 1897 is 3 annas 4 pies per acre. In the case of the non-aboriginal inhabitants of the Bānpur Māls, a more rigorous policy was followed. The former rate of rent was about 3½ annas per acre, but was enhanced to the full rates paid in the rest of the estate, the incidence of the rents thus fixed being 11 annas 8 pies per acre. **Bānpur Māls.**

In the headquarters subdivision 60 years had elapsed since the last settlement. In the resettlement proceedings rents were settled for all the tenants, including those who had held at privileged rents for the term of the expired settlement. The most important classes of tenants were those known as *thāni* and *pāhi* ryots, *i.e.*, resident and non-resident tenants. The rents of the latter had not been fixed for the term of the previous settlement, but the zamīndārs had enhanced them considerably during its currency, so that they were practically competition rents. The *thāni* tenancies, embracing the best lands of the villages and carrying many important privileges, such as heritability, fixity of rent for the term of settlement, etc., had been assessed at higher rates than the holdings of the *pāhi* tenants. In these circumstances, the general principle adopted for the settlement was that existing *pāhi* rents should generally be assumed to be fair and equitable, and should be left unaltered, and that *thāni* rents should only be enhanced when they fell below the *pāhi* rents by a considerable margin. At the same time excess areas, whether held by *thāni* or *pāhi* tenants, were assessed to rent. The net result of the operations was that the average incidence of rent over the ryoti area was Re. 1-11-7. A further account of the rents payable by different classes of tenants will be found in Chapter XII. **Puri subdivision.**

Rents in kind are still paid for a certain proportion of land. The commonest form of produce rent is that known as *dhulibhāg* (literally, a sharing of the dust), which implies an equal division of the grain as well as of bye-products. Under this system the entire cost of cultivation is borne by the tenants, and when the crop comes to maturity, it is reaped in the presence of the landlord's agent and is carried by the tenant to the **PRODUCE RENTS.**

threshing floor, where an equal division is made in the presence of both parties. Sometimes, however, instead of the crop being actually divided, it is appraised on the ground, and half the estimated value in cash is taken by the landlord as his share. It is estimated that in the case of ordinary rice land the landlord's share is about 8 maunds of paddy, worth Re. 1 to Re. 1-4 per maund at harvest, so that the rent actually paid would be equivalent to Rs. 8 to Rs. 10 in cash. A less common form of produce rent is that designated *phalbhāg*, *i.e.*, a division of fruit and grain only, the straw and other bye-products being retained by the cultivator.

Another form of produce rents, which is common in the district, is that known as *sanjā*, a term (literally meaning a contract) which is applied to the payment of a fixed quantity of agricultural produce. The latter generally amounts to about 6 maunds per acre, which would fetch Rs. 6 in a good year and Rs. 9 in a bad year. The quantity fixed has to be paid whether the season is favourable for the ryot or the reverse, and the rent thus presses most heavily on him when he is least able to afford it. Such rents appear to be highest where there is most land available for cultivation, as in Nij Khurdā and Bānpur. Another form of the latter system of rent payment found only in this district is that called *dekhāmanā*, which is also known locally as *reshi* and *sahan*. Under this system a fixed proportion of the produce is given, if the outturn is normal, but, if the crop is scanty, remissions are allowed. The only other class of produce rent calling for mention is that called *pānidhān*, *i.e.*, an arrangement by which a portion of a cash rent is payable in kind, *e.g.*, a tenant with a nominal rent of Rs. 4 may have to pay Rs. 3 in cash and Re. 1 in grain. The landlord fixes the rate, so that the tenant generally has to pay something more than he would obtain for his grain in the open market.

WAGES.

The wages commonly paid in the district for skilled labour are low. Masons are paid from 6 to 8 annas per diem according to skill, carpenters and blacksmiths from 5 to 8 annas, while in the towns male coolies get 4 annas, and female coolies and boys 2 annas as their daily wage. In the rural areas, however, artisans are not remunerated in accordance with what might be called the market value of their services. They are the servants of the village, and perform such services as are necessary to the community in consideration of holding service lands and receiving contributions in kind from each tenant. Thus, the carpenter, blacksmith, washerman, barber and astrologer are maintained by small grants of *jāgīr* land and by contributions levied from the ryots. Where no service lands are held, the village servants are remunerated

entirely in kind. The contributions vary from village to village, but it is said that a *chaukīdār* generally receives 2 sheaves of paddy per acre, a carpenter and blacksmith 5 *gaunis* per plough, and the washerman and barber 3 to 5 *gaunis* for each married person or customer. The *gauni*, it may be explained, is a grain measure varying in different places from 1½ to 6 seers of rice. Field labourers are usually paid a daily wage of 3 standard seers of grain a day, but some agriculturists pay a money wage of 1½ to 2½ annas a day, and on rare occasions as much as 3 annas. A recent Collector observes that in his tours he never found a cooly paid 16 pice a day for his work, and although such a rate may be paid in the harvest season, the average rate throughout the year is nearer 10 pice.

Labouring classes.

Daily labourers are known as *muliās*, and farm servants in permanent employment as *kothiās* or *haliās*. Almost every cultivator who owns more than 5 acres of land employ the latter, generally keeping one *haliā* for every 5 or 10 acres under cultivation. As a rule, they sleep on the premises of their masters and are paid Rs. 12 to Rs. 18 per annum, besides their daily food and an annual supply of clothing valued at about Rs. 2. Sometimes, however, they do not mess at their masters' houses, but take instead half the wages paid to an ordinary day labourer in money or kind. *Haliās* are recruited from the poorer cultivators, who have sold all their lands or retain only a few plots, and from among the Bauris or Savars. It is evident from the amount of their remuneration that the existence of a *haliā* is a hard one, and that he is a person standing as close to the margin of subsistence as is well nigh possible. If he has a wife and family, he has to support them on an allowance of Re. 1 to Re. 1-8 a month. The women and children of the family eke out this amount by such small earnings as they can obtain from occasional employment in the fields in busy seasons, and from collecting jungle roots, fruits and fuel. *Haliās* have nearly all taken advances from their employers, and find it difficult to free themselves from such bondage when once assumed. They are in fact practically serfs, who may be described as *ascripti domino* rather than *ascripti glebae*.

PRICES.

The cost of the necessaries of life has increased even more than the rate of wages, and the figures in the margin will show how enormously the price of rice, the staple food of the people, has risen during the last century in Orissa. It will be seen that the greatest increase took place after 1866, and it is indeed a common saying

Price of rice in seers per rupee.

1837-51	49·8
1852-66	42·7
1867-81	24·8
1892-96	19·8
1896-1905	17·7

that the high prices which commenced during the famine have never left the land. This is to a certain extent true, as after that time came a period of great activity in the improvement of the roads and harbours, the construction of canals, and the gradual development of foreign trade; and a steady rise of prices set in after this transition period. During the last quinquennium prices do not seem to have been much affected by the opening of the railway, probably because the country had already been opened out to a brisk export trade in rice by sea; but the effect of the railway on the general trade of the country and its potential value as a means of making prices independent of local demands are unquestionable. There has also been a great increase in the price of other agricultural produce, of pulses, *ghī* and tobacco. On the other hand, cotton yarn and oil have cheapened, while there has been but little change in the cost of sugar and of betel-nut, which every Oriyā chews. In recent years the average price of salt has shown a gradual fall owing to the reduction of the duty and improved facilities of communication; this fall has been very marked since the further reduction made in 1905, and consumption is increasing.

MATERIAL CONDITION OF THE PEOPLE.

Landlords.

Writing a century ago, Mr. Ker described the landlords of Purī as follows:—"The landholders are needy and indigent, especially the smaller proprietors, who constitute at least half of the whole number. Their improvidence of disposition is commensurate with their inferiority in the scale of civilization and refinement, and with this is combined a propensity to wanton extravagance, which would appear inveterate." It is said that this description is as true to-day as a hundred years ago, and that, generally speaking, the zamīndārs of Purī are uneducated and often incompetent, and that they have little or no desire to spend a portion of their income for the good of the public. But it should be added that with few exceptions they are not oppressive landlords.

They are generally divided among themselves by family disputes and involved in debt. The result is that about half of the zamīndāri interest in the district has now passed from the old landlord families to the great religious foundations and priestly classes of Purī or into the hands of the larger *mahājans* and usurers of this district and Cuttack. In the opinion of the Settlement Officer, Mr. McPherson, "the transfer of zamīndāri rights to the religious and usuring classes is no great matter of regret. The ryots find a better friend in such landlords as the Mahant of the Emār Math than in effete and degenerate descendants of old families. The Mahant raises and maintains

bāndhs, helps his ryots in time of calamity with loans of seed grain, feeds them when starving in years of scarcity, and generally seeks to secure his revenue by securing his rents. This can be said of few landlords in the district, either past or present. As a rule, they do absolutely nothing either for the welfare of their ryots or the improvement of their estates."

Professional classes.

The priestly class and the writer class form small sections of the community. The opening up of the country has benefited both classes, while the latter have also profited by the greater complexity of zamīndāri management and of office work generally. There is one section of the priestly class which calls for special notice—the Sāsani Brāhmans, who are dependent on cultivation. They form close Brāhman corporations, formerly owning whole villages, which were granted to them free of rent or at quit-rents by the Rājā of Khurdā. They still hold these villages at favourable rates, but the natural increase in their numbers, the absence of room for expansion of cultivation, and the gradual disintegration of the communal system have been sapping their prosperity. Though their numbers have increased, they have to maintain themselves out of the proceeds of the same amount of land. Their caste prevents them from cultivating their lands themselves, and they are now obliged either to sublet their lands or employ *kothiās* and thus incur extra expense. The Sāsan villages used to belong solely to them, but most of their property has now passed into the hands of outsiders, chiefly *mahājans*. Pilgrim hunters are now recruited from among the poorer of these Brāhmans.

Mercantile classes.

The prosperity of the trading class has undoubtedly increased with the development of communications and the introduction of the railway. But the chief merchants are not natives of the district. The rice merchants are mostly Muhammadans from Bombay, the cloth merchants Mārwāris from Jaipur and Mārwār, and the hide dealers Kābulis from Afghānistān. The Oriyā has, as a rule, little idea of trade and little commercial enterprise, his horizon being bounded by petty retail trade or by usury, which requires the expenditure of little energy.

Cultivators.

The cultivating classes have, on the whole, benefited by the rise in prices and the increase in the area under cultivation. Rent, which formerly absorbed at least one-third of the produce, does not now absorb more than one-sixth. Moreover, the general improvement in communications and the development of the country not only prevent the possibility of widespread famine, but also open up to the inhabitants of the district the chance of employment beyond its borders, and afford them opportunities

for disposing of their surplus produce at good prices. On the other hand, there is much indebtedness, the cultivators being in debt both to their landlords and professional money-lenders. A practice exists in Orissa of zamīndārs keeping granaries, which are filled from the produce of their own farms and also from the interest in kind derived from loans to their tenants. These loans bear compound interest at 25 per cent. recoverable at harvest time, and allowing for bad debts, give a safe return of 20 per cent. They affect the material condition of the cultivators in several ways. The interest is usurious and tends to impoverish the people; they form a direct encouragement to unthriftiness by affording facilities for borrowing—a practice that it is obviously the landlord's interest to encourage in order that he may place his stock out at interest instead of letting it lie idle in his store-house. Loans are sometimes taken so soon after the rice harvest as February, even in a good year; the result being that in the case of the poorer tenantry one year's crop does not carry them over two months of the new yeai without the assistance of advances. There is, in addition, the ordinary professional money-lender, who is certainly not more moderate in his terms than the landlord.

Generally speaking, however, it may be said that although the state of the cultivating classes cannot be described as one of plenty, certain sections enjoy a fair measure of prosperity. Comparing their present condition with what it was 60 years ago, the Settlement Officer says:—"While at the last settlement there was rude abundance in ordinary years varied by terrible suffering in years of calamity, there is now a generally harder struggle for existence, but greater immunity from exceptional hardship and an access to conveniences which 60 years ago would have been considered luxuries. Civilization and improvement, while bringing in their train general security and small comforts, have also brought the struggle for a livelihood nearer the margin of subsistence."

Artisans. The artisan class has also been benefited by the development of communications and the consequent intercommunication with large centres of industry, which has enabled them to keep up the level of wages and even to raise it. The supply of village artisans, blacksmiths, carpenters, potters, etc., is not in excess, and they can afford to exact good terms. Those who are willing to go further afield now have the Calcutta market in which to sell their services, and there is beginning to be a levelling up to the higher standard obtaining in districts from which Orissa has hitherto been cut off.

Labourers.

While traders and agriculturists have prospered, and the wages of artisans have increased, the wages of labourers have not advanced in proportion to the rise in prices. So long, however, as the labourer is paid in kind, as is usually the case when he works for an agriculturist, his actual earnings are not affected. This class is increasing not only by the natural growth of population, but also by recruitment from among the smaller peasantry. This is due to the decrease in the size of the holdings, which makes men who were previously peasants supplement their reduced incomes by working for others, and also to the smaller tenants selling their holdings. The result is a tendency for the labouring class to increase more rapidly than the local demand for their services. There are happily certain safety valves available, such as railway works and service in Calcutta and its neighbourhood. There is also emigration to the extensive waste lands in the Garhjâts, and to the unoccupied culturable land in the hilly tracts in the north-west of the district.

CHAPTER X.

OCCUPATIONS, MANUFACTURES AND TRADE.

OCCUPATIONS. ACCORDING to the statistics obtained at the census of 1901, 60 per cent. of the population are supported by agriculture, 16·5 per cent. by industries, 0·4 per cent. by commerce, and 4 per cent. by various professions. Of the agricultural population, 34 per cent. are actual workers, and these include 9,000 rent-receivers, 183,000 rent-payers and 13,000 labourers. Of the industrial population, 53 per cent. are actual workers, among whom are 10,000 fishermen and fish-dealers, 5,000 cow-keepers, milk-sellers, etc., 12,000 grain parchers, 6,000 rice-pounders, 11,000 sellers of firewood and charcoal, 9,000 cotton weavers and spinners, 5,000 basket-weavers and mat-makers, as well as numerous goldsmiths, braziers, coppersmiths, potters and carpenters. Of the professional classes, 39 per cent. are actual workers, including 1,000 priests, 8,000 persons engaged in temple service, and 2,000 teachers. Among those engaged in other occupations are 9,000 herdsmen, 5,000 beggars and 53,000 general labourers.

MANUFACTURES. The district contains only one town, Purī, and Purī is only a town of pilgrims and priests, monasteries and lodging-houses. In no sense of the word can it be described as a manufacturing town or industrial centre. In the rest of the district the people are dependent on agriculture. Practically the only artisans are those who have from time immemorial supplied the simple needs of a rural people. The villagers grow their own food, grind their own grain and build their own houses. Their needs are few, brass and earthenware utensils, coarse cotton cloth and other articles of daily use supplying nearly all their wants. Practically nothing is manufactured for export, and the craftsmen merely supply the every-day wants of the village communities. The only important industry which appears ever to have been exploited is that of salt manufacture, and this has been killed by foreign competition. At an early age, however, stone-carving must have been an important industry, if we may judge from the exquisite memorials still remaining, such as the great temples of Bhubaneswar and the solitary fane of Konārak; but this art is now confined to a few skilled craftsmen. Cotton-weaving appears never to have

had the same pre-eminence as in the adjoining districts of Cuttack and Balasore, and while the English merchant adventurers established factories in those two districts in the 17th century, they found no such flourishing trade in cloth as would promise success in this district, and consequently left it severely alone. Practically the only industry which is of importance at present, and is likely under present conditions to develop, is that of fishing.

The following is a brief account of the principal industries of the district.

Salt manufacture. Nearly a century ago Stirling said that the finest salt of all India was manufactured in the wild inhospitable tract along the sea-board of Orissa, and that the East India Company obtained from it, under their monopoly system, a net revenue falling a little short of 18 lakhs of rupees. In the Statistical Account of Purī published thirty years ago, salt was described as the chief manufacture of Purī, the centres of the industry being Pārikud and the tract to the north of the Chilkā lake. Ten years ago it was still of some importance, 195,000 maunds of salt being manufactured in 1896-97, and the Collector reported that there were two salt-producing areas, viz., the tracts at the mouth of the river Devī and the country lying on the borders of the Chilkā lake. But the work of manufacture was already confined to Tuā and Gurbai in the latter area, and the industry was fast declining, owing to the fact that salt could be brought by rail from Madras and sold cheaper than that manufactured locally, which had to be carried across the Chilkā lake by boats. The manufacture was finally stopped in 1899-1900, and with it died an indigenous industry which supported a large number of people.

Fisheries. Fishing is at present one of the most important occupations of the people of Purī. Special attention has recently been drawn to this industry by Mr. K. G. Gupta, I.C.S., in his valuable report on the fisheries of Bengal, from which the following information is mainly derived.

There is no deep-sea fishing anywhere in Bengal except in Purī, which alone has got an open coast. Even there such fishing is of the most limited extent, and is carried on not by local Oriyā fishermen, but by Telugu settlers from Ganjām, called Nuliyās, who are found in Purī, Nuāgāon, Arakhkudā, Khirisai, Sahadi, Rāmlenkā and Mānikpātnā. During the calm months they use the seine net, and at times make excellent hauls of bijram (Madras *seir*, Cybium guttatum), pomfrets, small soles, etc.; a kind of herring is also found in abundance. With the seine net the fisherman cannot go far out, seldom more than half a

mile, as one end of the rope to which the net is attached is left on the beach, where the net is eventually hauled. With small gill nets or hooks and lines the Nuliyās go to a distance of two or three miles in calm weather in catamarans, but their hauls are small. During the prevalence of the south-west wind, when the seine cannot be used, a little fishing is done with gill nets not far from the beach; but all deep-sea fishing practically ceases from about the middle of March to about the middle of September. During the cold weather there is a small export of fresh fish from Purī town to Calcutta; the rest is either sold locally or dried for export. The abundance and variety of sea fish caught with the rudest and most primitive of appliances indicate the wealth of marine life that may reasonably be looked for in the deep sea, for big shoals seldom come quite close to the beach, and the catches merely represent stragglers from schools and younger members of the larger kinds.

The Chilkā lake also forms a most valuable fishery. It abounds in fish of all kinds, chiefly mugils and perch, besides prawns and crabs, which grow to a large size; there is also a small oyster bed at Mānikpātnā. The best fishing grounds are situated on the south side of the lake near the sea, along the numerous creeks and channels, and round the low uninhabited island known as Nalabana. The fish are caught in the shallow water near the banks from October to November by means of fixed cruives (*jāns*), each of which is over a mile long and several hundred yards wide. Prawns are caught in abundance from January to March in bamboo traps fixed to screens of the same material. They are boiled and dried for the Burma market, or are simply dried for consumption in Orissa. Nets are also used in the creeks, as well as in the Chilkā itself throughout the year, and very large hauls are often made. Shoals of *hilsā* are found in the rainy season near the north-east corner where the Dayā falls into the lake. Owing to the absence of any large markets in the neighbourhood, most of the fish is dried, but the larger varieties are salted and exported to Cuttack, Purī and the Tributary States.

The lake is now largely fished, and the introduction of any improved methods of capture, without anything being done to increase the supply, would probably lead to the speedy depletion of the waters. It is connected with the sea by a very narrow mouth, which is frequently liable to obstruction, and its enormous water area is thus imperfectly replenished, so that overfishing would soon exhaust it. On the other hand, it affords an ideal ground for the artificial propagation of various kinds of estuarin

fish, especially perch, shads and grey mullets, whose favourite haunt it is; and it is believed that its supply of fish could be very largely increased by the establishment of hatcheries. At present, the lower classes inhabiting the banks of the Chilkā collect the frothy spawn and eggs (*sridhar*) that float near the edge during the monsoon, and fry them or put them in their curries. A morsel of this stuff means the destruction of thousands of fish. Even so, however, there is ample scope for supplying, from the present hauls, Calcutta and other important places with fresh fish, prawns and crabs from October to April.

Dry salting is the method most commonly employed for preserving fish. The fish are ripped up in two from the snout to the tail, the entrails are taken out, and the inside washed and cleaned. Salt is rubbed both inside and outside, and the fish placed in small rows under some pressure, as that of a plank, and the juice allowed to exude for a little time. They are next spread out in the sun for a few days until they are quite dry. Dry salt is then put inside, the quantity varying according to the size of the fish, and the halves which remain joined at the back are then folded, and the fish is ready for despatch. The fish keeps good for several months and is sent to different parts of Orissa, including Sambalpur. This is a very clean process and there is no particularly offensive smell. *Hilsā*, *bhetki* and all other large kinds, as well as the roes of certain varieties of mugils, are treated in this way. Boiling and drying in the sun is followed only in the case of prawns intended for the Burma market. This process is employed during the season, *i.e.*, from January to March, by a Muhammadan trader from Ganjām, who also exports to Burma. The prawns are merely boiled and dried in the sun, no artificial heating being practised. This form of preserving, though very effective, is unacceptable to the Hindus, as the fish being boiled cannot be eaten by them without loss of caste.

The most common method of catching fish in inland waters is by means of the *jān*. This is an extensive bamboo enclosure, by which the fish that come for shelter and food in the shallow water near a bank are cut off from the rest of the water and are kept confined for daily capture, until the enclosure dries up and the whole of the fish is caught. This method is much in vogue on the Chilkā, a single *jān* often covering more than a square mile. Another common method of catching fish is the erection of a *bajā* or *pattā*, *i.e.*, a screen of split bamboo is set up in shallow water, with a small space left in the middle where a bamboo trap is placed, in which the fish are caught as they go through.

The cast net with iron weights is in common use for smaller catches. It can be worked by one man either from a boat or on foot. It is dexterously whirled over the head and then cast, when it falls in the form of a circle. Drag nets are often used with boats, and a good many of them are provided with a purse; one of these nets, the *bara jāl*, though a drag net, has as its main portion a large pocket, and may, therefore, also be termed a purse net. For deep-sea fishing the fishermen use a large net called a catamaran *jāl*. One corner of the latter is held by a rope from the catamaran, the opposite corner is heavily weighted, and the rest of the net is kept stretched by means of floats and weights carefully arranged. When a shoal of *kaula* (Clupea fimbriata) pass through, a good many get entangled in the meshes, the floats sink, and the net is drawn up with the fish all hanging by their gills. Among other contrivances are baited hooks. There is a spot close to the Purī beach, which is named Pedraya by local fishermen, where ballast used to be thrown in the days when ships came in ballast. At this place lines, 64 feet long, are cast from catamarans to catch big bottom fish, two men with four hooks fishing from each catamaran, and using cuttle-fish as bait.

Another ingenious device is the *phānd* or noose used at the Nalabana island in the Chilkā lake. This is a cord made of fibre extracted from the stalks of palm leaves. A series of loops of gradually diminishing diameter are made of the twisted fibre, which are joined at equal intervals by a thin string of the same material. The loops look like tapering bags, which are attached to the reeds just a little below the surface of the water. Fish come to Nalabana through the shallow channels to feed, but having entered the thick reeds, lose their way and make for any openings they can find. Once a fish puts its head inside a *phānd*, it is unable to recede, and in its mad struggles gets more entangled and is often killed at once.

In concluding this sketch of the fisheries of Purī, mention may be made of those in the Khurdā estate. These are:—(1) Village tanks and reservoirs, for which no rent is paid; the fish are divided among the villagers and *sarbarāhkārs* in the proportion of $\frac{14}{16}$ths and $\frac{2}{16}$ths respectively. (2) Small nullahs and streams, which are leased annually to the highest bidder. (3) The extensive deep-water and foreshore fisheries of Tuā and Sātparā on the south-eastern shore of the Chilkā, which are leased by auction for periods varying from one to five years. (4) [illegible]ing fisheries, called the Bānpur-Chilkā fisheries, along th[illegible] western shore of the Chilkā from Bhusandpur to [illegible]

frontier. The fisheries last named, extending along the foreshore of *zilās* Rāmeswar, Kuhuri and Bānpur, include a certain area of deep water, but exclude all creeks and channels. They have been from time immemorial in the possession of the Khurdā fishermen tenants of the villages adjoining the lake, who paid no rent for the privilege of fishing until the settlement of 1896-97, when a rent of 8 annas a house in each fishing village was assessed. The most valuable of these fisheries are those round the islands of Tuā and Sātparā on the eastern shore of the Chilkā lake, where mixed fish and prawns are caught in large numbers.

Stone-carving. Purī is one of the few districts in Bengal in which stone-carving of any merit can be found. The present state of the industry has been described as follows by Mr. E. B. Havell in a monograph, *Stone-carving in Bengal*, published in 1906:—"Within the area in Bengal which may be described as a stone-building country, it is practically only in Orissa, under the flourishing native dynasties first established in the early centuries of the Christian era, that a great style of stone architecture and stone-carving has developed. The splendid antiquities of Orissa have often been described. In the ornamentation of the hundreds of temples, monasteries, and other works of stone which were built in the course of many centuries in the districts of Cuttack and Purī, the Orissa carvers acquired the most extraordinary technical skill in architectural decoration Hindu art has known. There is a pitiable remnant of this splendid art still struggling for existence all over the Orissa Division, but unless Government adopts some more effective measures for preserving it than those hitherto employed, it is not likely to survive many years.

"There are carvers still to be found whose work, in spite of all the discouraging conditions which surround them, is hardly inferior in artistic perception and technical skill to that of their predecessors. A few of them have been lately employed by the Archæological Department in restoring ancient carvings at Konārak and elsewhere; and the Director-General, in his report for 1902-03, says that 'the work of the modern stone mason, a native of Bhubaneswar, does not fall much behind the old work, except that modern restorations of human and animal figures are less graceful than their old models.' If this employment were of a permanent kind, no better means could be found for reviving Indian stone-carvers' art, but unfortunately there is no prospect that it will afford them anything but temporary existence.

"I am able to endorse fully Mr. Marshall's appreciation of modern Orissa carving. It is often not very inferior to the old

work. In style it is much more interesting than the better known sand-stone carving of Rājputāna and the Punjāb, which is often monotonous and more suggestive of furniture than of architectural decoration. While the Orissa carvers are in no way inferior to those of North-West India in delicate surface ornamentation, they have not hampered themselves by the limitations of a wood carver's technique, but have fully realized the technical possibilities of their material for producing bold effects of light and shade suitable for architectural work.

"I will take the work of a carver named Chintāmoni Mahāpātra, of Pathuriāsāhi in Purī town, to illustrate the present condition of the craftsmen and the style of their art. I found him and his sons employed in making small soapstone-carving by the sale of which they now earn a living. They generally work in soapstone obtained from Domparā near Cuttack, because it is the easiest material to work with, and because the prices their work obtains in the bazar are generally very small. Occasionally, however, they work in a potstone obtained from the Nīlgiri hills near Balasore, which is much more difficult to carve. The soapstone-carvings are generally coloured black to make them resemble the more expensive work in sandstone, a process which depreciates the real artistic merit which many of them possess. I purchased from him for a rupee and a half a charming little sculptured group of Krishna and the Gopīs, which he had just finished in soapstone. Fortunately the blacking process had not been applied. The carving only represents two or three days' work, but it is full of animation and artistic feeling, while the composition and the combination of gradations of relief are admirable. There are five or six other families of stone-carvers in Purī who live by the same kind of work, as there is now no demand for the really fine architectural carving which they can produce. There are several splendidly carved stone doors in Purī town, executed within the last 15 or 20 years by Chintāmoni and two other stone masons or carvers, called Mahādeba Mahāranā and Kapil Mahāpātra, also of Purī."

Mr. Havell goes on to say that one of the doorways of Emār Math, a Vaishnavite monastery, would bear comparison with the carving of the mediæval Gothic cathedrals in Europe. "The delicate surface carving in low relief is admirably contrasted with the bold cutting of the pilasters supporting the projecting cornice over the doorway. It is altogether a fine piece of work, worthy of the best traditions of Orissa architecture." He also mentions another example of the same men's work, one of a series of columns supporting the verandah of a private house, and says that since these were completed, about ten or fifteen years ago, the men have

been compelled to subsist on the cheap soapstone work before described, as there is now no demand for finished sculpture of a better class.

"It is deplorable," Mr. Havell adds, "that the standard of public taste in Bengal should have fallen so low that skilled artists of this stamp have no employment for their best talent; while the lowest class of commercial Italian statuary, incomparably inferior to the art which these men can produce, is in regular demand at prices which would make all the sculptors in Orissa rich beyond their wildest dreams. The very fine carved doorway referred to above, which is an incomparably finer example of architectural decoration than any to be found in Calcutta, is said to have cost only about Rs. 1,200, or less than is often paid for a common garden statue, a simpering Venus, or a vulgar ballet-girl in marble.

"In other places in the Purī district a certain number of stone-carvers have found employment lately in the building or restoration of Hindu temples. At Bhubaneswar, Rājārānī, Mukteswar, Siddheswar, Bhāskareswar, Brahmeswar, and Parasurāmeswar have been recently restored, and various sculptured figures have been replaced. The Collector reports that at Tāngi and Bolgarh in the Khurdā subdivision two temples have recently been built in which there is a certain amount of carving. Stone-carving is also carried on to some extent in Haldiā, Ghatikia, Tangri, Nārāngarh, and other villages in the Khurdā subdivision.

"Besides stone-carving proper, there is a good deal of architectural work carried on in Purī in a kind of conglomerate stone, too coarse-grained for fine carving, in which the ornamental details are roughly blocked out by the chisel and afterwards finished by a layer of fine stucco or chunam. The process of applying fine plaster to stone work is a very ancient one in India, and is used for figure sculpture as well as for ornamental details. The chunam often serves as a ground for fresco painting, as in the well-known decoration of the Buddhist carvers of Ajanta. In Purī I noticed a number of finely designed pedestals or altars for the *tulsī* plant executed by this process, which in former times reached a very high degree of perfection. It is quite a distinct art to stone-carving and is not practised by ordinary stone masons. For a damp climate like that of Bengal this plaster work has the practical advantage of preventing moisture from penetrating through bricks and porous kinds of stone."

Weaving.

Tusser and cotton cloths are made by hand looms in many places. Some of them are prized for their fine texture or durability, but they cannot, at any rate in Purī town and the larger

villages, compete with the machine-made articles of English manufacture. The industry is therefore not thriving, and the weavers are taking up other means of earning a livelihood in increasing numbers. The District Board has had some local weavers trained at Serampore with a view to introducing weaving by means of the fly-shuttle loom; and the fly-shuttle has also been tried in the Kotdesh estate under Government management, where the *Tahsīldār* taught the local weavers to use it. It was found that a weaver working with it could earn four times the wages that he could with the ordinary contrivance, and there is some hope that fresh impetus may be given to the industry under the auspices of the Committee of the Utkal Union Conference, the Honorary Secretary of which has taken considerable pains to improve the local looms in a practical fashion and to overcome the difficulties which local weavers find in manipulating the fly-shuttle.

The manufacture of tusser cloth by the hand looms now in use is very limited, being confined to a few families of Gauriā Pātrās and Asani Pātrās. They obtain the raw silk from Keonjhar and dispose of the cloths at neighbouring villages and *hāts*, as well as to the itinerant pedlars called *bepāris*. The fabrics woven by them are called *mathā*, *baulbāta*, *pānchi* and *kāntiā*. They are chiefly used locally, but are also exported to a small extent to Cuttack and the Tributary States of Ranpur, Nayāgarh, Narsinghpur, Daspallā and Tigiriā.

Brass work.

Brass and bell-metal utensils and ornaments are made in considerable quantities, and exported to the neighbouring Tributary States, Calcutta and other places, and are also sold locally. Their manufacture is on the decline owing to the import and sale of German silver ornaments at a cheaper price. The chief centre of the industry is Bālkāti. Many quaint brass figures of various gods and animals of grotesque shape borne on wheels find a ready sale in Purī town.

Other industries.

The other industries are of small importance. Gold and silver ornaments are made, but the workmanship is poor. Coarse sugar and molasses are prepared from sugarcane, and rough pottery, matting and baskets are made locally; while laterite, sandstone, gravel, etc., are quarried for building and for road metalling.

TRADE.

The trade of Purī is of far less importance than that of Cuttack or Balasore. The principal article of export is rice, which is shipped in large quantities from Purī to the Madras ports, Ceylon and Mauritius. In recent years the export trade by sea reached its highest level in 1903, when rice to the value of 7 lakhs of rupees was exported. In 1906-07, 19 vessels with a tonnage of 41,500 tons entered the port and cleared with cargoes valued at

Rs. 5,20,000. The variations in the value of this trade from year to year are caused by fluctuations in the demand for rice in Colombo and Mauritius, the surplus produce being carried off by rail when there is no demand in these places. The sea-borne trade is confined entirely to exports of rice, and there are no imports.

The other principal exports are gram, pulse, unrefined sugar, coconuts, brass and silk ; and the chief imports are salt, cotton piece-goods, refined sugar, spices, iron, tobacco, and kerosene oil. Nearly the whole of the export and import trade has now been absorbed by the railway. In the rains a certain amount of traffic passes up and down the rivers in country boats, but after the rains the rivers soon dry up and the traffic ceases. A small trade is also carried on with the adjoining Tributary States of Nayāgarh, Ranpur and Khandparā, but it is gradually decreasing. The local merchants carry on operations on only a small scale, traders from up-country monopolizing the more important branches of trade, *e.g.*, the rice merchants are Muhammadans from Bombay, the cloth merchants Mārwāris from Jaipur and Mārwār, and the hide dealers Kābulis from Afghānistān. The local mercantile classes are members of the Teli, Guriā and Tānti castes, the majority of whom are petty dealers rather than merchants.

Markets. The chief centres of trade are Purī, Khurdā, Satyabādī, Piplī, Bālkāti and Bānpur. The greater portion of the local trade, however, is carried on at various markets (*hāts*) usually held twice a week in villages in the interior. At these markets villagers dispose of their surplus stores of rice, grain and other local produce, and make purchases of cotton piece-goods, ornaments, metal utensils, spices, sweetmeats, tobacco, kerosene oil, and the like. The *hāt* consists usually of a group of ricketty stalls huddled together in a convenient mango tope, for the use of which the stall-keepers and vendors of wares pay fees in cash or kind to the owner. In the larger *hāts* the attendance of the villagers frequently rises to over a thousand. A great deal of the local barter of the district is also carried on at the great religious gatherings, such as the Jain Jātrā held in March before the shrine of Mangalā Thākurānī in Kākatpur, the Chandrabhāgā and sun festival at Konārak, the Thākurānī festival at Satyabādī, and all the great Purī gatherings, like the Rath Jātrā, the Chandan Jātrā, the Snān Jātrā, etc.

Weights and measures. The standard weight in common use is the Cuttack seer of 105 *tolās*, which is used by all classes of traders dealing in indigenous goods. For imported goods, traders use the standard seer of 80 *tolās*, which is also known as the Balasore seer. For weighing vegetables, turmeric, fish and brass utensils, the unit is the *bisā*,

which is equivalent to 27 *pals* in the Khurdā subdivision, to 20 and 24 *pals* in different parts of the headquarters subdivision, and to 30 *pals* in the Bānpur thāna. A *pal* is equal to 6 *tolās*. The most usual measure of capacity is the *gauni*, the capacity of which varies very much, for the *gauni* is merely a basket which easily loses its shape, while its capacity also depends on how much the grain is pressed, heaped up, or filled in loosely ; it varies, in fact, from 2 to 9 Cuttack seers. For measuring country cloth the unit of length is the *hāth* or cubit, which varies from 18 to 22 inches, while for foreign cloths the English yard of 36 inches is used. The local land measure is the *mān*, of which there are several varieties, but the commonest is almost exactly equal to one acre.

CHAPTER XI.

MEANS OF COMMUNICATION.

DEVELOPMENT OF COMMUNICATIONS.

THE state of internal communications a century ago has been well described by Mr. Toynbee in his Sketch of the History of Orissa. "When we took the province in 1803, there was not a road, in the modern sense of the word, in existence. What were then called roads were mere fair-weather cart-tracks without bridges and without proper ferry arrangements for crossing the numerous water-courses which they intercepted; they passed, however, for the most part over high ridges of uncultivated land, and were thus more practicable than they would be at the present day, when cultivation has been so enormously extended. The traffic from the south to Cuttack passed along the eastern shore of the Chilkā lake, between it and the sea, to Purī and thence followed exactly the line of the present great Jagannāth road. It now all passes through Khurdā along the Ganjām road, the old route being abandoned to Nuliyā fishermen and antelope. The ruins of the old rest-house for pilgrims still remain—the only visible record of its former existence. Another line from Purī passed through Khurdā and the Barmūl Pass into the Central Provinces *viâ* Sambalpur. Proceeding northwards, the line from Purī passed through Cuttack, Padampur, Arakpur and Barambardāh to Jājpur (then generally spelt Jehajpur), and thence to Bhadrakh through Dhāmnagar. Thence the line followed as nearly as possible that of the present road. It was not, however, until 1804-05 that this line was adopted. The former route was through Nīlgiri and Mayūrbhanj. It passed in many places through dense jungle infested by tigers and other wild animals, and to keep down these the Mughals and Marāthās used to give grants of land rent-free to individuals on condition of their reclaiming the grant."

The construction of the Jagannāth road was not sanctioned until the year 1811, and in October 1812 Captain Sackville was appointed to superintend the work. The greater part of the earth-work of the section between Cuttack and Purī was completed in 1813, but it was not reported passable until 1817. In 1819 an attempt was made to improve and extend communication by sea by the appointment of a Master-Attendant

at Mānikpātnā on a salary of sicca Rs. 500 per mensem. The first incumbent of the post was Lieutenant Minchin of the Bombay Marines. The object of the appointment was the double one of improving and encouraging trade, and of saving the lives of persons shipwrecked on the coast. The Collector and Salt Agent were appointed a committee for superintending and controlling the Master-Attendant's department. Two surf boats were constructed at Purī, and an establishment of boatmen sanctioned to work them. In 1827 a bungalow for the use of the Master-Attendant was built at Mānikpātnā, and a surf boat was also stationed there with a crew. All these measures, which were undertaken with a view of improving the trade of the Province and reviving its former comparative commercial prosperity, were of little or no avail. The establishment of the Government salt monopoly was a fatal blow to the private export trade which formerly existed, and the internal land communications of the Province were so deficient that a new one was not to be so easily or rapidly developed as seems to have been expected by the Government and the local authorities.*

The grave deficiency of communications which still existed as late as 1866 was made apparent in the great Orissa famine, when it was said that " the people were shut in between pathless jungles and impracticable seas, and were like passengers in a ship without provisions." The state of affairs at that time was graphically described by the Famine Commissioners of 1867 as follows :— "The whole province is geographically isolated to an excessive degree. To the north and north-west the hill tracts merge into countries more hilly, wild and inaccessible, by which they are separated effectually from Central and Northern India. On the other side, the nature of the coast and the sea is such as effectually to stop all native traffic for the major part of the year. With one exception—False Point—there is no protected anchorage of any kind, and that exception may be said to be in some sense almost a recent discovery. Such being the difficulties on either side of the length of Orissa, the only ordinary mode of communication with the outside world is by the route traversing its length. That, however, is so much intersected by the streams already mentioned, and has been hitherto so little rendered practicable by art, that it is comparatively little used by wheeled carriages ; pack-bullocks still predominate at all times ; in the rainy season wheeled traffic is quite impracticable ; and when the rains are heavy, even pack-bullocks cannot be used. At this day the European officer

* G. Toynbee *Sketch of the History of Orissa*, 1873.

who cannot obtain a special steamer must find his way into Orissa slowly and tediously, as ancient officers may have travelled in the days of Asoka, and the very post takes several days between Calcutta and Cuttack."

The famine of 1866 directed attention to the state of the Orissa districts, and measures were taken to prevent the recurrence of a similar disaster, roads being opened up, the coast surveyed, and canals constructed. The communication with the outside world which was thus established effectually broke in upon the isolation of Orissa, and more recently the Bengal-Nāgpur Railway has extended its system through the district. The district is now fairly well supplied with means of communication by the railway and roads, but in some parts internal communications are still deficient. It is reported that the eastern portion towards Astrang, Kākatpur and Nimāparā is inaccessible for months, owing to the want of culverts and causeways; while the area between the Khurdā-Purī branch of the railway and the Khurdā road is said to be still practically without communications of any kind. The income of the District Board, moreover, is small and scarcely sufficient to meet the cost of maintaining the present roads, so that it will be long before the district is placed in a sound position with regard to communications, unless material assistance is given by Government.

The difficulty of providing roads is not very great in the Khurdā subdivision, which is mainly a high and well-drained tract, with ridges and high lands connecting different villages. Along these uplands roads can easily be constructed, and laterite gravel for metalling is plentiful everywhere, except in the south of Bānpur. Besides the roads maintained by the local authorities, there are a large number of native cart-tracks, some of which are really good and naturally metalled roads. The case is far different in the headquarters subdivision, which is a deltaic tract intersected by a network of rivers, many of which cannot be bridged except at a prohibitive cost, and which periodically overflow their banks and inundate the surrounding country. The main arteries of communication have no feeder lines in the eastern and larger half of this subdivision, and though there are everywhere cart-tracks, which are passable in fair weather, they all disappear in the rains. Foot passengers then use the crests of the river embankments as the main avenues of communication, and when they leave them, have to stumble along the *hiras* or ridges dividing the fields or wade knee-deep through mud and puddles.

ROADS. The district roads maintained by the District Board have a length of 248 miles, of which 108 miles are metalled and 140 miles

are unmetalled roads, and there are also a number of village roads, with an aggregate length of 137 miles, in its charge. The Public Works Department maintains 114 miles of road, all metalled. The following is a brief account of the main roads of the district.

Jagannāth road.

The most important road in the district is the Cuttack-Purī road, also known as the Jagannāth or Pilgrim road, of which 39 miles lie in this district. As mentioned above, the portion of this road in the Purī district was stated to be passable in 1817; but the whole road was not complete until 1825, and it was not metalled till nearly 50 years later. The construction of the road was a difficult task, as the greater portion rests on an embankment raised high above the level of the surrounding country. The bridges were built almost entirely of stone taken from the ruined forts and temples in which the Province then abounded; the cost of their construction being met by a Bengali gentleman, who took this excellent opportunity of helping pilgrims on the road to Jagannāth. His name is commemorated by an inscription on a bridge 3 miles from Purī, in Persian, Hindī, Bengali and Sanskrit, which says:—"The late Mahārājā Sukhmay Ray of Calcutta having presented a lakh and a half of rupees towards the construction of this road and the bridges on it, the Governor-General in Council has ordered these inscriptions on stone to be set up to mark his generosity and renown. Date A.D. 1826." Before the completion of the railway the road used to be thronged with a continuous stream of pilgrims on their way to Purī, but foot traffic has now declined considerably, and cart traffic is also growing less. It is, however, one of the most perfect roads to be seen in the Province, and in portions is lined with an over-arching avenue of trees, which afford grateful shade to the foot-sore pilgrim.

Cuttack-Ganjām road.

The Jagannāth road is maintained by the Public Works Department, which is also in charge of the Cuttack-Ganjām road, a metalled highway passing through the whole length of the Khurdā subdivision. Its length within the district is 68½ miles. This road and the Jagannāth road are linked together by two cross-roads, the Piplī-Khurdā road and the Patnaikā-Khurdā road. The former, which is 13¾ miles long, leaves the Pilgrim road at Piplī and runs due west through Khurdā Road Station to Khurdā. The other takes off at Patnaikā, 15 miles from Purī, and runs north-west to the same place through Jagadalpur and across the Bārunai pass. Both these cross-roads are metalled, and both are intercepted by the Dayā river, which is fordable in the hot weather and is crossed by a ferry in the rains. The Cuttack-Ganjām road has also a small branch from Tāngi to the Chilkā lake.

Other roads.

The following are the other important roads of the district :—(1) The Khurdā-Kalāpathar road, 18 miles long. This road, which is metalled, is continued to Maradā, where it joins the Sonpur road, thus connecting this district with the Central Provinces. (2) The road from Bāghmāri to Bolgarh, 21 miles long. This road, which is also metalled, is a branch of that mentioned above, from which it takes off at Bāghmāri at the ninth mile. Beyond Bolgarh it is maintained by the Khurdā estate as far as the frontier of the Tributary State of Nayāgarh. (3) The road running from Bālugān to Bāghurā *viâ* Bānpur, 18½ miles long; it is metalled as far as Pratāp. (4) The Sardeipur-Chandkā road, passing through Bhubaneswar and Khandagiri, 14½ miles in length. This is also a metalled road.

Among unmetalled roads the most important are the Piplī-Astrang road, passing through Nimāparā and Arjunpur and ending in Astrang near the mouth of the Devī, and the Mādhab-Purī road, generally known as the Gop road, which is 50 miles long. It takes off from the Jagannāth road at Phulnākhrā and passes through Gop and Bālighai, and after skirting the Sar lake runs into Purī across the sandy littoral belt. It is a useful road in fair weather, but difficult in the rains, and from Bālighai to Purī it is a mere track across the sandy waste. Near Gop it is intercepted by the Kushbhadrā river, which has to be crossed by a ferry.

Bungalows.

There are 6 road inspection bungalows belonging to the Public Works Department on the Cuttack-Purī Road, at (1) Phulnākhrā, (2) Sardeipur, (3) Piplī, (4) Mukundpur, (5) Jaipur, and (6) Purī, of which the last five lie within the Purī district. There are 7 road inspection bungalows belonging to the same Department along the portion of the Cuttack-Ganjām road lying within this district, at (1) Chandkā, (2) Chhatābar, (3) Khurdā, (4) Jankiā, (5) Tāngi, (6) Sunākhalā, and (7) Barkul. The following bungalows have been built for the inspection of the embankments under the control of the Public Works Department, viz., (1) Kanti, (2) Garadiā, (3) Kanās, (4) Sāhuparā, (5) Rārhmal, (6) Kerāndipur, (7) Torāniā, (8) Sainso, (9) Bālighai, (10) Bālipatnā, (11) Nimāparā, and (12) Jankādeipur. The District Board has constructed inspection bungalows at the following places: (1) Bāghmāri, (2) Khurdā, (3) Kalāpathar, (4) Pratāp, (5) Jagadalpur, (6) Pichkuli, (7) Gop, (8) Astrang, (9) Bhubaneswar, (10) Bālugān, and (11) Bāliantā. The Government estate of Khurdā has inspection bungalows at (1) Khandagiri, (2) Sunākhalā, (3) Hantwār, (4) Jatnī, (5) Seko, and (6) Bhusandpur; and the Forest Department at (1) Bolgarh, (2) Daras, (3) Dhuānāli, and (4) Ankulā.

Ferries. The principal ferries in the district are those at Kanti, Beguniāparā, Lingpur, Madāgani (on the Ganjām road), Jankādeipur, Bālkāti and Bāliantā (the three last named being on the Purī Trunk Road), and at Sātparā, Ossiā, Pokharā, Sunāmukhi and Seālo.

RAILWAYS. The main line of the Bengal-Nāgpur Railway between Calcutta and Madras runs through the district throughout its length for a distance of 64 miles, entering it near Bhubaneswar and leaving it a short distance from Barkul. From Khurdā Road station a branch line, 28 miles long, runs almost due south to Purī town. It has been proposed to make a railway from Khurdā to Sambalpur *viâ* Sonpur, a distance of 220 miles, and a partial survey has been made.

WATER COMMUNICATIONS. The sea along the coast is fairly deep, and vessels can go close to the shore; but there is no place where a vessel, even of small draught, can take refuge in bad weather, and during the greater portion of the year there is a heavy surf through which only *masulā* or surf boats can pass. The only port in this district is that of Purī, but this unfortunately is only an unprotected roadstead. Owing to the difficulty of landing in the high surf, passenger traffic by this port is very limited, and the trade is not of much importance. In the interior there is a considerable amount of traffic along the rivers during the rains, but in the hot weather they all cease to be navigable for more than a few miles above their mouths, except the Devī, by which rice finds its way by boat to the Tāldandā canal and Cuttack. The three great rivers of the district, the Kushbhadrā, Bhārgavī and Dayā, are navigable throughout for several months of the year. The Kushbhadrā is the first to dry up in its upper reaches, but in its lower reaches it is navigable by small country boats the whole year round. The Dayā and the Bhārgavī are usually navigable throughout till about the month of January; even in the hot weather country boats may be seen along their banks for at least 10 miles above the point where they enter the Chilkā. The boats belong chiefly to Ganjām traders, who bring loads of bamboos and other goods and in return carry off the surplus rice of the southern *parganas*. They come *viâ* the Ganjām canal and the Chilkā lake, which is available for boat traffic the whole year round.

Boats. No account of the water communications of Purī would be complete without a mention of the boats in use. On the rivers, dug-outs and ordinary country boats are in use, which call for no special description. On the Chilkā boats called *patwā* are used; these are flat-bottomed boats specially suitable for shallow water. On the sea the fishermen use *masulā* boats and catamarans. The

masulā boats have been introduced by the Nuliyā fishermen from Madras. They are large flabby flat-bottomed crafts of planks sewn together with cane strips, which are eminently adapted for crossing the surf, as they give to the waves. They can, however, only be used in good weather close to the beach, and are not fit for going out to sea. Catamarans are also largely employed by the fishermen. They are composed of four tree trunks held together by wooden pegs, the two trunks in the middle acting as a keel.

POSTAL COMMUNICATIONS.

There are 30 post offices in the district, and 297 miles of postal communications have been opened. The number of postal articles delivered in 1906-07 was 888,000, of which 460,000 were letters and 317,000 were post cards. The value of money orders issued in the same year was Rs. 6,56,000 and of those paid Rs. 8,96,000. The total amount deposited in the Savings Bank was Rs. 52,000, and the number of deposits was 1,722. There are 4 postal telegraph offices, situated at Purī, Khurdā, Jatnī and Piplī, from which 13,250 messages were issued in the same year.

CHAPTER XII.

LAND REVENUE ADMINISTRATION.

HINDU REVENUE SYSTEM.

DURING the time of the Hindu kings of Orissa the country was divided into two administrative divisions—the military fiefs and the Crown lands. The former, which comprised the hilly tracts to the west, a strip of land along the sea coast to the east, and some portions in the interior, were divided among a number of military chiefs, on condition that they protected the country from foreign invasion, maintained peace within their borders, and furnished contingents of troops when called upon. These chiefs in their turn distributed the land among *paiks* or peasant militia, who tilled the land during peace and took up arms in time of wa.. In the Crown lands, which consisted of the fertile alluvial zone between the hills and the sea, part of the land was assigned in grants to the ministers and servants of the king, and the rest was divided into several circles, called *bisis* and *khands*. Each circle was managed by an officer, called *bisoi* or *khandpati*, who had the chief control of local affairs and supervised the police administration. Under him was an officer called a *khandait*, who was in direct charge of the village police, besides an accountant, called *bhoi-mūl*, who superintended the collections of revenue, drew up accounts of produce and cultivation, and kept a register of all the particulars of the fields. Each of these fiscal divisions contained several villages, which then, as now, formed the unit of administration. In each village there were a headman (*padhān*) and an accountant (*bhoi*), who were responsible to their divisional superiors for the revenue of the village.

MUGHAL REVENUE SYSTEM.

After the Mughal conquest a regular settlement of the Crown lands was taken in hand, being begun in 1581 by Todar Mal, Akbar's general and finance minister, and concluded in 1591 by the Viceroy, Mān Singh. Todar Mal retained intact the old division of the Province into military fiefs and Crown lands, which were henceforth called respectively Garhjāts and Mughalbandi, contenting himself, in regard to the former, with a verbal allegiance and a nominal tribute. He also respected the provision made for the royal household and great officers of the court under the Hindu

dynasty, and left 1,547 square miles as the undisputed demesne of the Khurdā Rājās and their dependents, the Rājā retaining Khurdā, Rāhāng, Sirai and Chaubiskud, aggregating 1,342 square miles, or more than half of the present area of the district. The remaining portion of the Crown land he managed through the old Hindu officers, only changing the names of divisions and divisional officers. The *khands* and *bisis* were now called *parganas*, the *khandpatis* and *bisois* were styled *chaudhris*, the *bhoi-mūl* received the appellation of *kānungo wilāyati*. The portion of the *pargana* under the immediate charge of each of these officials was called a *tāluk*, and the managers generally *tālukdārs*; the *padhān* again was called *mukaddam*, an Arabic word meaning a headman. The *jāgīrs* of the great military chiefs were called *kilās*, and for their Hindu title of Bhuiyā was substituted zamīndār, an appellation which was originally restricted to the Rājās of Khurdā, Aul, Sārangarh, and the Garhjāts.

The fiscal officers of the Mughalbandi or revenue-paying tract had no proprietary right in the soil, and were not zamīndārs in the modern sense of the term. The Musalmāns had no leisure for or knowledge of the details of administration. What they wanted was a body of powerful native middlemen, who would relieve them from the trouble of dealing with the people, and have both power and local knowledge enough to enforce the revenue demands. In the Hindu fiscal officers they found such a body ready to their hands; but this body, as it became more and more necessary to the foreign rulers, also grew more and more independent. It soon lost its character as a staff of revenue officers, and split up into a number of different landholders, each with more or less of admitted proprietary right, according as each individual had strength and opportunity for asserting himself; but none possessed anything like a full ownership in the land. This state of things continued till the year 1751, when the Province passed into the hands of the Marāthās.

The Marāthās retained the old political division of the Province into military fiefs and royal domain. The former, comprising the hilly country on the western frontier and extensive marshy woodland tracts along the sea-shore to the east, was parcelled out in divisions, called *kilās*, amongst certain Rājās, chieftains, or zamīndārs; and the latter, comprising the central plains, was divided into four *chaklās* or divisions, viz., Cuttack, Bhadrakh, Soro and Balasore, each of which was subdivided into about 150 *parganas*. The revenue administration of the whole area was entrusted to 32 officials called *āmils*, each of whom was individually responsible for the revenue assessed on his division. He was remunerated by

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grants of land called *nānkar*, which he held rent-free, and by certain other perquisites on account of collection charges. He was assisted by a *sadar kānungo*, under whom were employed a number of *gumāshtās* or agents in each *pargana*. Each *pargana* was again divided into one, two, three or more of the following divisions, each called after the officer responsible for its revenue, viz., (1) *tāluk chaudhri*, (2) *tāluk kānungo wilāyati*, (3) *tāluk kānungo*, (4) *tāluk sadar kānungo*, and (5) *tāluk mazkurī* or *mukaddami mazkurī*.

This system led to the weakening of the position of the *tālukdārs*. The one object of the *āmils* was to realize the revenue by hook or by crook; and they soon found it convenient to recognize only those *tālukdārs* who paid without trouble, and, when they had any difficulty with the *chaudhris* or *kānungos*, to treat with the village *mukaddams* and accept their engagements for the payment of a lump sum. The latter thus began to develop into small landholders, and at the same time the *gumāshtās*, from being mere office accountants and collecting agents, began to usurp the functions of the *tālukdārs*, whose collections of revenue they were supposed to supervise. A noticeable instance of this process is afforded by the acquisition, in 1775, of the zamīndār's *sanad* of *parganas* Kotdesh, Kālijori and Antrodh by Trilochan Patanaik, an Oriyā Karan, who was originally a *gumāshtā* under the Faujdār of Piplī, but eventually succeeded in founding the largest zamīndāri family in the district.

The result of the Mughal administration had been that the divisional officers called *chaudhris* and *kānungos* gradually became quasi-proprietors of extensive estates and divisional landholders. Under the Marāthās, the village headmen, dealing directly with the treasury officers, developed into village landholders; and after the British conquest, claimants belonging to both classes came forward with conflicting titles. It may be safely stated, however, that, during the confusion that prevailed, there was no class to whom a proprietary right can be said to have been allowed. The State owned the land; while the *kānungos* (both *sadar* and *wilāyati*), the *chaudhris*, *mukaddams*, and others exercised such rights within their respective limits as they chose to assume, so long as they met the demands made upon them. Numerous alienations were made by all classes, but there was nothing like an acknowledgment of such a privilege by the Marāthā authorities. Those who then or subsequently chose to arrogate to themselves the title of zamīndār were either principal *mukaddams* with a hereditary right of collection, but without any right, title, or interest in the land itself; or fiscal officers, chiefly *chaudhris* and *kānungos*, in charge of the collections. Some of them, however,

such as the zamīndār of Kotdesh, had zamīndāri *sanads*, and were designated zamīndārs; but they had very few of the rights of a zamīndār in the present sense of the term.

EARLY BRITISH ADMINISTRATION.

When the British conquered the Province, they found that the land revenue was being paid by the various revenue agents enumerated above, some of whom represented large tracts of country, and others single villages and plots of homestead land. The same measure was meted out to all, irrespective of individual history, rights or origin; and in Regulation XII of 1805 the whole body of revenue agents were comprehensively styled zamīndārs. The officers in charge of the administration were enjoined to make the settlement of the land revenue with the zamīndārs or other actual proprietors of the soil, except only when the property in land was disputed, in which case it was to be made provisionally with the person in possession. But there was no body of landholders with well-defined rights, such as existed elsewhere, and the local officers had no means of knowing what were the rights and titles of the different landholders. No revenue documents could be obtained except some records of previous assessment. The *āmils*, *sadar kānungos*, *tālukdārs* and *mukaddams* were all intent on preserving for their own use the information which should have been in the hands of Government. Some were busy in establishing a proprietary title which had never existed, others in furthering a claim to hold rent-free lands which were liable to assessment. In the end, engagements were taken from the parties in possession, who had been responsible for collecting the land tax and paying it into the treasury; all such persons, under whatever designation they had discharged this function, became under our system landholders. This was the origin of the Orissa zamīndārs.

A proprietary body was thus created out of the various intermediate holders between the ruling power and the actual cultivators. All were now given the same rights, their quasi-hereditary, quasi-transferable office of managing the land and transmitting the land revenue being converted into a full proprietary tenure. The abstract ownership had always been vested in the ruling power; and this we made over to the landholders, except that we retained the power of increasing the land revenue due from them. In this respect, the revenue system of Orissa differs from that of the rest of Bengal, inasmuch as the settlement for the Government land revenue is not of a fixed and permanent character, but is made for a term of years only, subject to an increased assessment at the end of every fresh period.

A different policy was pursued with the Rājā of Khurdā, who paid only a *peshkash* or quit-rent, like the Khandaits or feudal chiefs, who held large estates along the sea-board and paid but a little *peshkash*, kept bands of *paiks*, and were bound to render military service when called upon. Upwards of 50 estates of this nature at one time existed in the Province, but under the Marāthā rule few of them had maintained the privilege of paying only a quit-rent, and most had gradually been reduced to the position of ordinary zamīndārs. These petty chiefs, at the time of the British conquest, made some attempt at resistance; but they gave way on the approach of the troops and were pardoned. In recognition of their ancient lineage, and in order to secure their loyalty, Government, by Regulation XII of 1805, confirmed in perpetuity the *peshkash* of seven estates, among which were Khurdā and Marichpur. This arrangement, however, was immediately upset in respect of Khurdā, the most important of these estates, for the Rājā rebelled and his estate was confiscated in 1805. Khurdā has ever since been held direct by Government.

SETTLEMENTS. The first settlement of the Province, which was for one year only, was concluded early in 1805 and was followed by a number of temporary settlements. The history of these early settlements is an unfortunate record of assessment on insufficient enquiry and of the enforcement of inelastic rules for the realization of inequitable revenues. The Collector had no reliable information as to the real assets of the estates, for the zamīndārs and *āmils* combined to withhold all papers, and he had to proceed on a very rough estimate of the quantity of land in cultivation and on the reports of interested subordinates. The evils arising from such ignorance of the real circumstances of the people, from the general disorganization of administration, and from the severity of the assessment, were aggravated by the stringency of the Bengal regulations and sale laws.

Under the rule of the Mughals and Marāthās, the persons whom we recognized as proprietors of the soil were, in theory at least, officers of Government, responsible to it for the revenue they collected, and were not entitled to any remission. But, when droughts or serious floods occurred, the cultivator did not pay his rent, and there is reason to believe that the native rulers recognized such calamities as a valid excuse for short payments, so that the actual collections always fell short of the full demand. In the early days of British administration the Bengal regulations were enforced, the assessment became a fixed and invariable debt, which the zamīndār had to discharge to the day on pain of losing his estate, in spite of the fact that Orissa is peculiarly liable to

suffer from the extremes of drought and flood. The consequences of this attempt to engraft the rigid administration of a permanently settled Province on a country and people wholly unsuited to it were disastrous. Arrears accumulated rapidly, and in 1806 began the system of putting up defaulting estates for sale in Calcutta, a policy which allowed Bengali speculators to buy valuable properties at low prices. Some of the oldest families of Orissa were ruined; their estates were sold up and passed into the hands of Bengali adventurers; and the hardships of the revenue system being aggravated by repeated droughts, even these failed to pay the revenue, and the collections fell far short of the demand.

The Khurdā rebellion of 1817 served to bring home to the authorities the deep discontent and real grievances of the Oriyās; and in Regulation VII of 1822 Government shortly afterwards proclaimed its intention of concluding a settlement based on a detailed investigation into the circumstances of the Province and a determination of the rights of all parties. Preparations for this settlement were commenced as early as 1830, and it was held to run from 1837, although the proceedings were not finally completed before 1845. The settlement thus concluded was made for 30 years, and should therefore have expired in the year 1867, but the state of exhaustion in which the great famine of 1866 left the Province rendered it inadvisable to undertake a resettlement. It was felt that the minute investigations necessary would have been distressing to the people, and consequently it was decided to grant an extension of the settlement of 1837 for 30 years without any enhancement of revenue. The last settlement was concluded in 1899, with effect from 1897, and will expire in 1927.

The above settlements were confined to the headquarters subdivision; and the Khurdā estate, which is under the direct management of Government, has had a number of separate settlements. The first settlement was made in 1805, but was of a summary nature, being a mere valuation of produce. Another settlement was made in 1806, and in 1806-07 *kilā* Pānchgarh, a portion of Khurdā, was formed into a separate *mahāl* and made over to Rānī Muktā Devī of Sambalpur. The revenue assessed, however, could not be realized by her, and she finally relinquished the *jāgīr* in 1818 or 1819. In the meantime, summary settlements and various experiments in the farming out of the rest of the estate were tried with disastrous results. These e[illegible]riments continued up to 1817, when the rebellion of the *pa*[illegible]mpleted the temporary ruin of the estate. Parts of Khur[illegible]t is said, were almost depopulated, large tracts of arable lan[illegible]re thrown

out of cultivation, and all revenue work came to a standstill. At the conclusion of the rebellion, another settlement was made in 1818, and this was followed by various short settlements, viz., in 1822, 1824, 1837 and 1857. On the expiry of the last settlement a cadastral settlement was effected by Mr. W. C. Taylor in 1882; and on its expiry a resettlement was made by his son, Mr. J. H. Taylor, which was completed in 1898, the new assessment coming into force in December 1897 and being sanctioned for 15 years.

REVENUE-PAYING ESTATES.

Khurdā estate.

The largest estate in the district is the Khurdā estate, which has an area, according to the latest survey, of 618,154 acres, of which all but 27,000 acres are comprised in the Khurdā subdivision. It is held under direct management, with the following exceptions:—(*a*) two service tenures held by the Khandaits of Haldiā and Maliparā subject to the payment of a fixed quit-rent and the performance of certain nominal police duties; each of these tenures has an area of about 4,500 acres; (*b*) one village liable to the payment of a quit-rent only, known as the *tanki bāhāl* village of Bīrnarsinghpur; (*c*) the estate known as the Ekhrājāt Mahāls, extending over 68,000 acres of land, which was originally part of the Khās Mahāl, but was assigned, partly in 1858 and partly in 1863, revenue-free to the Rājā of Purī in lieu of an annual payment of Rs. 23,631; and (*d*) thirteen revenue-free villages covering about 5,000 acres.

The area held under the direct management of Government in this estate is 565,356 acres comprised in 1,377 villages, of which 1,309 villages containing 540,376 acres lie in the Khurdā subdivision, and 68 villages containing 24,980 acres are included in the headquarters subdivision. The administration of the estate rests with a Deputy Collector known as the *Tahsīldār*. The subordinate staff consists of *sarbarāhkārs*, who collect the rents and are allowed a deduction, calculated at a percentage of the actual amount collected, to cover their risks and expenses. There are over 176,000 tenancies, and the ryots' holdings are generally small. Their rent is fixed for the term of the settlement, the rent as recorded at the last settlement being Rs. 3,77,127.

Other estates.

In the headquarters subdivision more than two-thirds of the revenue is derived from 10 estates, viz., Kotdesh (now paying Rs. 1,41,297), which is under the direct management of Government owing to the recusancy of its proprietors at the settlement of 1899, Krishnachandra, Krishnanagar and Rāhāng (Rs. 63,504), Delāng (Rs. 43,564), Kokal (Rs. 6,486), Kotsāhi (Rs. 7,321), Piplī (Rs. 6,291), Rorang (Rs. 5,525), and Golarā (Rs. 3,881) The area under the direct management of Government is 116,416

acres with a rent-roll of Rs. 1,56,723. The only permanently settled estate is that known as Marichpur, with an area of 67½ square miles, which was given a permanent settlement by section 35 of Regulation XII of 1805.

The permanently settled estate of Marichpur and all the temporarily settled estates are alike in nature. The only distinctive feature is, that while the revenue payable by the former is fixed in perpetuity, that payable by the others is liable to adjustment at the expiration of the term of each settlement; and that the rights of under-tenants in the latter have been defined and recorded. The majority of the estates are held by the descendants of the *tālukdārs*, rent-collectors, village headmen, holders of resumed *jāgīrs* and the like, who were found, at the time of the British conquest, to be paying their revenue direct into the Marāthā treasuries; they also include descendants of the holders of the larger revenue-free properties that were resumed and assessed to revenue during the early years of last century. All these landholders have long since thrown off their distinctive appellation of *tālukdārs*, *kānungos*, *mukaddams*, *padhāns*, etc., and have readily assumed the generic and more significant title of zamīndār. In fact, every *sadar mālguzār*, *i.e.*, every person who now pays revenue directly to the treasury, not being a servant of the State, is called a zamīndār, *i.e.*, a proprietor of land, while the distinctive titles of *mukaddams*, *sarbarāhkārs*, *padhāns*, etc., have been left to the subordinate tenure-holders.

The area in which the zamīndār collects rents from the tenants is called *hastabud*. It is a common practice, however, to grant *ijāras*, *i.e.*, to farm out villages to individuals at a sum which leaves them a certain margin for the expenses of collection and ordinary profit. The lessees, who are called *mustājirs*, are merely temporary farmers. Their rights are limited by the terms of the lease, ceasing on its expiry; and even during its continuance they are liable to ejectment for failure to carry out the terms of the contract.

REVENUE-FREE LANDS.

The free grant of land for the maintenance of Brāhmans, for the endowment of monasteries, and for the upkeep of shrines, has always been regarded by Hindus as a becoming act of piety. It is no matter for wonder then that in Purī, with its large Brāhman population, its numerous monasteries, and the holy shrines of Jagannāth and Bhubaneswar, such assignments of land should have been very numerous. The various Muhammadan and Marāthā officials also alienated land freely, and the result was an enormous number of revenue-free lands, called *lākhirāj*, meaning "without revenue." On the acquisition of the Province in 1803,

the British found a large proportion of the cultivated land held under various revenue-free grants, and as a preliminary to an enquiry into the validity of their titles, all who claimed to hold land revenue-free were required to register their claims and deposit their *sanads*, or deeds of grant, in the central office at Cuttack. For five years this office was kept open, and in that time upwards of 128,000 claims were registered. In 1815 the registry was reopened, with branch offices at Balasore and Purī, and 30,000 more *sanads* were filed. Many of these claims were known to be fraudulent, but no attempt was made to sift them till 1837. Government then instituted enquiries to test their validity, enquiries which lasted for nearly 10 years, and eventually the right to hold land free of revenue was recognized in the following cases:—

(1) Lands assigned revenue-free under grants from the Marāthā Rājā of Berār, or from any zamīndār, *tālukdār*, or actual proprietor of land, as endowments of the temple of Jagannāth, or of *maths* in the vicinity of the temple, or for similar purposes.

(2) All grants for holding land exempt from payment of revenue made previous to October 1791, provided that the grantee actually and *bona fide* obtained possession of the land so granted, and held it exempt from the payment of revenue, before that date, and that the land was not subsequently rendered subject to the payment of revenue by proper officers or orders of Government.

(3) All grants for holding land exempt from the payment of revenue, made subsequently to October 1791 and prior to October 1803, which had been confirmed or expressly admitted before the latter date; provided that, by the authority of the existing Government, the grantee actually and *bona fide* obtained possession of the land so granted, and held it exempt from the payment of revenue before October 1803, and that the land had not been afterwards rendered subject to the payment of revenue by the officers or orders of Government.

(4) Small quantities of land not exceeding 74 *bīghas*, held exempt from the payment of revenue under grant made prior to October 1803, and *bona fide* appropriated as endowments for temples or for other religious or charitable purposes, or the proceeds of which were enjoyed by individuals, whether Muhammadan or Hindu, being priests or religious advisers of the great body of cultivators.

(5) *Bādshāhi* grants made previous to October 1803; provided that the grantee actually and *bona fide* obtained possession of the land so granted previous to that date, and the grant had not

been subsequently resumed by the proper officers or orders of Government.

(6) All grants made or confirmed by the British Government subsequent to October 1803, and grants held under invalid title which the Governor-General in Council thought fit not to resume.

(7) Small plots of ground for village idols.

The lands so confirmed are generally known as *lākhirāj bāhāl*, *i.e.*, "confirmed without revenue," or more shortly *bāhāl*, as opposed to the resumed or *bāziāfti* land. Land confirmed without revenue for the term of the incumbent's natural life is known as *hinhayāti lākhirāj.*

The revenue-free lands fall under two main heads, according as they are the absolute property of an individual or assigned in trust for a charitable or religious purpose. The first class includes *brahmottar* or land originally assigned for the support of Brāhmans, *khairāt* or grants to mendicants and other poor Hindus, and *khushbāsh*, literally comfortable dwelling, *i.e.*, grants made to Brāhmans and other respectable cultivators for their houses. Land of this class is the absolute property of the grantee. He can sell or give away the whole or any part of it and grant mortgages and perpetual leases. He pays rent to no one, and only renders to Government taxes and cesses according to the value of his property. Lands of the second class consist mainly of *debottar* or "lands bestowed on the gods," by which term are known all lands assigned for a religious purpose. Among such grants may be mentioned *amruta-manohi* or charitable endowments for the support of the Jagannāth temple. Properties of the second class are all of the nature of trusts; the land becomes the absolute property of temple, idol, monastery or saint, while the management is vested in a trustee who is variously called the *sebāit* or minister, *mārfatdār* or agent, *mahant* or abbot, or, in the case of a Muhammadan shrine, the *mutwāli* or *darogā*.

The most important of the revenue-free properties are the Jāgīr Mahāls of Mālud and four other *parganas*, and the endowments of the Jagannāth temple. These latter include the Ekhrājāt Mahāls in the Khurdā subdivision and the Satais Hazāri Mahāls, of which a large portion is included in the headquarters subdivision. These properties have an interesting history, of which the following sketch may be given.

Satais Hazāri Mahāls.

The Satais Hazāri Mahāls form a revenue-free property made up of villages and shares of villages and of money assignments. After the conquest of Orissa by the Marāthās, the Rājā of Khurdā was forced to surrender to them, in lieu of payment for military

services, the *parganas* of Rāhāng, Sirai, Chaubiskud and Lembai, forming a part of the lands excluded from the Mughal settlement. Out of these the Marāthās assigned the revenues of certain lands for the support of the temple of Jagannāth at Purī, making good from the public treasury the annual deficit. This endowment the British Government recognized, and further undertook the management of the temple and the payment of the expenses connected with it; but in 1843 it withdrew from the management and made it over to the Rājā of Purī, who had been appointed Superintendent of the temple. At the same time, it made over to the Rājā the estate of Satais Hazāri Mahāls, yielding an annual rental of Rs. 17,420, which was the last remaining portion of the endowment of the temple at the time of the conquest of the Province in 1803.

The revenue of the Satais Hazāri Mahāls is derived from the following sources in Purī :—(*a*) 12 *hastabud* villages in *parganas* Rāhāng, Chaubiskud, Lembai and Paschimduai; (*b*) 50 *bāhāl tanki* villages and portions of villages; and (*c*) certain allotments from 8 *tanki bāhāl* villages, from 10 *tanki bāziāfti* villages, and 8 *sarbarāhkāri* and *mustājiri* villages, all of which form part of the Rāhāng estate. Outside the district the estate includes two *mukaddami* villages in Dālijorā in Cuttack, one village in Asureswar in the same district, and certain lands in *kilā* Daspallā, from which timber for the cars of the gods is supplied.

Ekhrājāt Mahāls. Until 1858 the Government paid an allowance of Rs. 16,517 towards the upkeep of the Jagannāth temple, but in that year Government decided to make no more annual payments, and in lieu thereof transferred to the Rājā of Purī a portion of the Khurdā estate with a rent-roll of Rs. 16,827. Subsequently, in 1863, Government transferred a number of other villages with a rent-roll of Rs. 6,889 in lieu of the annual payment of Rs. 6,804, which it had hitherto made for the maintenance of a police force to preserve order in and about the temple. The lands thus transferred in 1858 and 1863 are known as the Ekhrājāt Mahāls, *ekhrājāt*, or more properly *ikhrājāt*, being an Arabic word meaning expenses, so that the expression means literally lands assigned for expenses. The estate comprises the whole of *zilā* Tapang and 51 villages in *zilā* Rāmeswar. Its area is 67,520 acres, and it contains 124 villages.

Mālud Jāgīr Mahāls. When the British conquered Orissa in 1803, the Mālud *jāgīr* were held by one Fateh Muhammad Khān, to whom the first Commissioners granted a *sanad* entitling him and his heirs to hold their *jāgīr* revenue-free in perpetuity in consideration of their services to the British. It is said that when the British

troops marched from Ganjām in 1803 to conquer Orissa, Fateh Muhammad undertook to guide the army across the swamps of Chilkā, and tradition says he was promised every village through which the troops passed, and that their route was in consequence somewhat circuitous. Section 34 of Regulation XII of 1805 confirmed the *sanad* granted to him; but he was afterwards dispossessed of a large area by the Rājā of Pārikud. The *parganas* of Mālud, Bajrakot, Mānikpātnā and Andhāri comprise the *jāgīr mahāls* confirmed as revenue-free by that Regulation. Their total area is 72½ square miles, while the Pārikud estate extends over 67½ square miles. The Rājā of Pārikud still pays a quit-rent of Rs. 1,600 per annum to one of the descendants of Fateh Muhammad.

LAND TENURES OF KHURDA.

The following is a brief account of the land tenures of the Khurdā estate, of which Government is the proprietor.

Revenue-free lands.

One of the most influential classes in the estate consists of the *lākhirāj bāhāldārs* or holders of revenue-free lands. Their tenures are of two kinds—*brahmottar*, over which they have full proprietary rights with power to alienate, and *debottar* or *pīrottar*, *i.e.*, lands which they hold in trust for endowments without power to alienate. The latter are held by *mārfatdārs* and *sebaks*, whose position was defined as follows in the resumption proceedings of 1843:—"*Mārfatdārs* or trustees of endowments, and *sebaks* or priests and other attendants at temples holding endowment lands for their remuneration, or holding such lands in trust for the benefit of the endowments, have no rights in Khurdā to transfer their trusts or services, or to alienate the lands attached to the several endowments. All such persons are classed at the settlement under which they hold the lands as mere servants of the idols, and liable to dismissal by the Collector for misconduct." After the settlement of 1899, however, it was decided that, as the right given to the Collector by these proceedings had not been exercised and Act XX of 1863 put the religious endowments in Khurdā on the same footing as elsewhere in Orissa, it was not expedient for Government to interfere. The area of revenue-free lands thus held in perpetuity in the Khurdā *kilā* is 5,231 acres, besides the Ekhrājāt Mahāls and 13 entire *lākhirāj* villages with an area of 4,972 acres.

Altogether 4,173 acres are accounted for by *jāgīrs* or service lands and by *minhās* or homestead lands held rent-free. There are numerous varieties of miscellaneous service *jāgīrs*, of which an account will be found in Mr. Taylor's Settlement Report, such as *jāgīrs* granted to *gāri chaudhris* and *mānjhis* of *ghāts* or ferries, grace *jāgīrs* or rent-free lands granted for past services, and

hinhayāti jāgīrs held rent-free for the lifetime of the holders. There are also many varieties of *minhā* lands. *Paik minhās* are the homestead lands of the old native militia (*paiks*) granted rent-free for certain services. *Sarbarāhkāri minhās* are the homestead lands of the *sarbarāhkārs*, held rent-free during the term of their office. *Grām sebak minhās* are the usual rent-free grants enjoyed by village servants, such as barbers, blacksmiths, carpenters, potters, astrologers, and washermen. There are also *minhās* granted for religious or public purposes, including sites granted for religious, educational and public buildings. *Garib prajā*, or *minhā* lands granted to the poor and exempted classes, are rent-free homesteads of the landless and aboriginal classes, such as Bauris, Savars, etc.

Tandkār jāgīrs are rent-free *chākrān* or service grants, held by *tandkārs*, *i.e.*, men who act as criers or assistants to the *sarbarāhkārs;* no rights of occupancy can accrue in them. *Dalai jāgīrs* are rent-free service grants enjoyed by the headmen of the old native militia or *paiks*, who are now chiefly used for revenue work, such as escorting treasure, summoning tenants, and guarding the tents of Government officers on tour. *Paik jāgīrs* are found only in the Bānpur Māls, a tract in which there are no *chaukīdārs*, the Pān *paiks*, to a certain extent, taking their place. As there is very little crime in the Māls, the chief duties of the *paiks* are attendance on Government officers as guards and guides through the forests, and the escort of treasure. A similar class of holdings is that known as jungle *paik jāgīrs*, *i.e.*, service lands held by jungle *paiks* or their descendants. These men were required for the purpose of watching and guarding the forest, when forest conservancy was being introduced in Khurdā.

Revenue-paying lands. Altogether 27,178 acres are held by *rafā tankidārs*, *i.e.*, holders of invalid grants formerly held subject to the payment of quit-rent, who agreed in 1839 by compromise (*rafā*) to pay Rs. 4 or Rs. 4-12 for every *bāti* (20 local *māns* or 9 acres) of land in their possession and to pay enhancement at every settlement calculated in the same proportion as the enhancement of the rent-paying tenants. The average rent now settled is annas 12-4 per acre. A small area is held by *bāhāl tankidārs*, *i.e.*, the holders of tenures on small quit-rents fixed in perpetuity. Besides these, there are two ordinary tenure-holders having lands in 12 villages under leases granted for the reclamation of waste lands.

Ryots. The settled ryots in Khurdā are the descendants of the ryots who received *pattās* and gave *kabuliyats* for the first time in 1820. There are now 123,349 tenancies of this nature, comprising 197,498 acres and paying rent of Rs. 3,23,222, the incidence per acre being Re. 1-10-2. Occupancy ryots in Khurdā would be

ryots who have purchased lands from settled ryots within the last 12 years, and who have no other cultivation in the villages in which the purchased lands are situated; but such cases have not been distinguished from settled ryots. Non-occupancy ryots are ryots cultivating *nayābādi* land, *i.e.*, land newly brought under cultivation; at the last settlement their number was 4,535, and the area cultivated by them 5,606 acres. *Chāndinādārs* are non-agricultural tenants occupying homestead or garden land only. They are mainly shopkeepers or holders of homestead lands, and include a class of tenants known as *khushbāsh* or privileged tenants, who are mostly Brāhmans, Rājputs and Karans.

Sarbarāhkāri jāgīrs are lands held by *sarbarāhkārs* by virtue of their office. They are assessed to rent, which is deducted from the remuneration allowed to the holders as *sarbarāhkārs.* The latter have no occupancy or other right in the lands beyond their term of office, and their *jāgīrs* are therefore purely *chākrān* or service land. They consist of some of the most valuable lands in the estate, being mostly situated in parts of the villages commanded by sources of irrigation. The area of these *jāgīrs* at the last settlement was 7,954 acres, and there were 915 *sarbarāhkārs* holding *jāgīrs* in 1,740 portions of villages. Altogether 9,710 acres are held by Khandaits, *i.e.*, superior service tenure-holders holding af a fixed quit-rent or *peshkash.* The former duties of these Khandaits were the arrest of dacoits and bad characters, and the reporting of offences, but these services are no longer rendered. The *khandait jāgīrs* pay quit-rents in perpetuity subject to the condition that they may be resumed in case of misconduct, this proviso being expressly stipulated in the terms of the grant.

LAND TENURES OF THE PURI SUBDIVISION.

The land tenures of the headquarters subdivision fall generally under one or other of the following heads:—(1) Proprietors of estates, who are directly responsible to the State for the revenue of the land they own, *i.e.*, *mālguzārs* or zamīndārs. (2) Revenue-free proprietors, holding their lands free of revenue in perpetuity, *i.e.*, *lākhirāj bāhāldārs.* (3) Tenure-holders with quasi-proprietary rights, holding under the proprietors, viz., *mukaddams*, *padhāns*, *sarbarāhkārs* and *shikmī zamīndārs.* (4) Purchasers or recipients of proprietary rights in small plots of land from the zamīndārs or *mukaddams*, such as *kharidādārs.* (5) Holders of resumed revenue-free tenures, or *bāziāftidārs*, falling under 2 classes, viz., *nisfi*, *i.e.*, those holding at half rates, and *kāmil*, *i.e.*, those holding at full rates. (6) Holders of small areas permanently assessed at quit-rents, known as *tankidārs.* (7) Resident cultivators, whose right to hold at a rent fixed for the term of settlement has been recognized,

viz., *thāni* and *chāndinā*. (8) Cultivators who have not such recognized rights, *i.e.*, *pāhi* ryots, occupancy and non-occupancy. (9) Persons holding land free of rent in consideration of their services to an individual or to the community, *i.e.*, *jāgīrdārs*. (10) Under-tenants of classes (4) to (8).

Tenure-holders. Under the zamīndārs are a number of tenure-holders paying their revenue through the proprietors of the estates within which their lands lie. They are for the most part descendants of village headmen, such as *padhāns* and *mukaddams*, and of the rent-collectors called *sarbarāhkārs*. The old Hindu name of the village headman was *padhān* (contracted from *pradhān*, meaning chief), but most of this class were absorbed, under the Arabic form of the name, as *mukaddams* into the Muhammadan system, their duty being to collect rents, superintend cultivation and settle ryots in the villages. All these were transformed in course of time into tenure-holders; while the zamīndārs' subordinate rent-collectors, the *sarbarāhkārs*, gradually acquired separate tenures, just as their masters, having been originally rent-collectors of a higher grade, acquired the substantial interest of zamīndārs. As the incidents of the *padhāni* and *mukaddami* tenures differ only in one trifling respect, it will be convenient to discuss them together.

***Mukaddams* and *padhāns*.** When Orissa came into the hands of the Mughals, four *parganas*, Lembai, Sirai, Chaubiskud and Rāhāng, were left, with *kilā* Khurdā, to the Rājā of Khurdā as his personal demesne. The village headmen responsible to the old Hindu officers for the village revenue were called *padhāns*, but in the tracts taken over by the Muhammadans the name was changed to *mukaddam*. Under the Mughal administration the rights of the *mukaddams* developed, and became superior to those owned by the *padhāns*, who still remained in the four *parganas* of the south. In 1760 the Rājā of Khurdā was compelled to relinquish these *parganas* to the Marāthās, by whom they were brought under direct management (*khās*), and they continued to be so managed when first taken over by us in 1803. During this period the *padhāns* acquired more than equality with their brother headmen in the Mughalbandi, and their claims to be regarded as proprietary tenure-holders were fully acknowledged at the settlement of 1837.

The incidents of the tenure as then settled were as follows:—(1) The tenure is hereditary, transferable, and divisible, subject to the proviso that no division of rents can be made without the consent of the zamīndārs. Any division of rent allowed by the zamīndār for the time being would be binding on his successors in interest, but would be annullable by the auction-purchasers at a sale for arrears of revenue. (2) The *padhān*

exercises the same proprietary rights within his village that the zamīndār exercises in *hastabud* villages. (3) The *padhān* is a proprietor of a share of the rental of the village. His allowance is usually 20 per cent. of the village assets, and the amount payable by him to the zamīndār is fixed for the term of settlement. (4) In default of payment of rent, the tenure is sold under the provisions of Act X of 1859, and of Chapter XIV of the Bengal Tenancy Act, which has been extended to Orissa. The balance of the purchase money left after liquidating the arrear is paid to the defaulter. (5) The *padhān* is entitled to 5 per cent. *mālikānā* in case of recusancy. (6) In the event of recusancy, he is entitled to a claim of re-entry at the ensuing settlement. The incidents of the *mukaddami* tenure differ from those of the *padhāni* tenure only in one respect, viz., that the *mukaddam* is not entitled to a claim of re-entry in the settlement following that in which he recuses.

The *mukaddams* are subdivided into three classes—(1) *maurasi* or hereditary, (2) *kharidādārs*, who purchased a hereditary right from the *tālukdār* or *mukaddam*, and (3) *sate mukaddam*, appointed by the people of the village as their representative, or appointed by the zamīndār to superintend the collection of rent and cultivation in one or more *mauzās*. The incidents of these three classes of *mukaddami* tenure are now exactly the same. The *padhāni* tenures are almost confined to *parganas* Lembai, Sirai, Rāhāng and Chaubiskud. At the last settlement 259 such tenures, held by 3,507 tenure-holders, were recorded, while there were 486 *mukaddami* tenures, held by 680 tenure-holders. The latter are most common in the Kotdesh *pargana*, where 356 of the total number are found.

Both *mukaddami* and *padhāni* tenures have been subdivided to a very marked extent, with the result that the *mukaddams* and *padhāns* as a class are losing their importance. "The experience of the last sixty years," says Mr. Nathan, "shows that the undisputed rights of succession and the freedom of transfer which the *mukaddam* has gradually acquired, and which we have finally recognized, are a fatal gift which is gradually undermining his existence. The devolution of property obeys in Orissa the Mitākshara law. The constant splitting up of shares which this system involves has a continual tendency to make the tenure insufficient to support the family. When this pressure begins to be severely felt, one of two things happens. Either the *mukaddams* succeed in gradually ousting the ryots, and, by cultivating the lands themselves, support their families and pay the rent, or they find the struggle hopeless and are forced to sell their ancestral rights.

Sometimes they disappear altogether; more frequently they remain in the village, cultivating their ancestral *paitrāli* lands as ryots of the new purchasers. In 43 villages in which I have made enquiries on this point, I find that the total number of *mukaddams* has increased from 156 to 401, *i.e.*, by more than 150 per cent., and this notwithstanding that the natural increase has been checked by extensive sale. These *mukaddami* interests are never sold by the original *mukaddams* except through necessity, and therefore the transfer of half the *mukaddami* rights shows that the old *mukaddams* are finding it hard to maintain their position. Many of the villages are bought up by large *mahājans* and by the land-owners."

Sarbarāhkārs. The class known as *sarbarāhkārs* has been created in several ways. Some *sarbarāhkārs* were originally servants of the zamīndārs, who collected their rents from the cultivators and enjoyed *jāgīrs*; some obtained possession of their villages as farmers only, but gradually obtained a prescriptive right to the tenure, as it descended from one generation to another; while others again were *sardār paiks*, who were bound to attend the summons of the chief and paid rent for that part of their village lands not occupied as *jāgīr*. The following principles laid down by Government in 1838 may be accepted as an authoritative declaration of the rights and incidents of the *sarbarāhkāri* tenure:—

(1) The tenure is recognized as one of the existing under-tenures of the Province. (2) The Collector at the time of making a settlement must, as in the case of *mukaddams*, fix the share of the existing rental to be allowed to a *sarbarāhkār* and the amount payable by him to the zamīndār for the village under his management. (3) If a *sarbarāhkāri* tenure is found at the time of settlement in the possession of several joint *sarbarāhkārs*, the Collector, with the concurrence of the zamīndār, may select one or more of the body to be recorded manager of the *sarbarāhkārs*. (4) *Sarbarāhkārs* so selected and recorded cannot be ousted from their tenures, except for default of payment of rent or for mismanagement proved to the satisfaction of the Collector. (5) The tenure should never be admitted at the time of settlement as a hereditary property (*maurasi sarbarāhkāri*), unless it has been held as such uninterruptedly from a period antecedent to the British accession, *i.e.*, antecedent to 14th October 1803, and unless the claimant is in possession of the tenure at the time or within a year previous to the time of settlement. (6) In cases in which hereditary succession or uninterrupted occupation cannot be shewn, but the claimant himself has been long in possession and is in possession at the time of settlement, the Collector may,

in consideration of occupancy and according to its duration and circumstances, propose a temporary admission of the tenure (*miādi sarbarāhkāri*) for such term and on such conditions as the case may seem to require. (7) No admitted *sarbarāhkāri* tenure, hereditary or temporary, can be alienated or subdivided without the consent of the zamīndār.

At the last settlement 211 such tenures held by 1,184 tenure-holders were recorded.

Shikmī zamīndāri tenures.

Another class of tenure calling for notice is that called *shikmī zamīndāri, i.e.*, literally an included estate. These tenures are almost entirely confined to the Jāgīr Mahāls of Pārikud, Mālud, etc., where the right and immunities of the *shikmī zamīndārs* are exactly the same as those of the zamīndārs in other *parganas*. They are so called simply because their rent is paid, not into the Government treasury, but into that of the *jāgīrdārs*, who in that respect stand in the same relation to the *shikmī zamīndārs* as Government does to the zamīndārs in other parts of the district. There are also a few such tenures in the Kotdesh estate.

Kharidā tenures.

Another important class of tenure-holders consists of *kharidā-dārs* or purchasers of waste lands. It was customary in the days of the Mughals and Marāthās for the superior revenue officers to recognize a species of sale, by which those who engaged for the revenue transferred small areas of waste land and jungle to persons who undertook to bring it under cultivation or to found villages. The areas were supposed to be small and worthless, but fraud was practised in many cases, and valuable lands were frequently alienated for a small consideration. The term *kharidā jamābandi* is generally applied to these tenures. At the last settlement they numbered 1,000 with an area of 2,400 acres.

Bāziāfti tenures.

Bāziāfti tenures are tenures which were formerly held revenue-free, but have been resumed and brought on the district rent-roll, the deeds of grant under which they were held not being considered genuine or valid. The holders were, however, declared entitled to enter into immediate engagements with Government, and a settlement was accordingly concluded with them. Those dispossessed *lākhirājdārs* who had been in continuous ancient possession, and had held in good faith, were assessed at an amount equal to one-half the gross rental; and in cases where the *lākhirājdār* was himself the cultivator, at one-half of the gross value of the land. Those who had not held their tenure in good faith, but who had been long in possession, were assessed at full rentals, and were allowed to retain possession of the land; while the lands of those who had not been in long possession, and whose

tenures were not valid, merged into the parent estate, the settlement being concluded with the zamīndār. Those who were assessed at half rates for the term of the settlement of 1837 are called *nisfi bāziāftidārs*, and those who were assessed at full rates are called *kāmil bāziāftidārs*. At the last settlement they were dealt with as ryots, whose special privileges had expired, but in consideration of the very low rents at which they were found to be holding, and to prevent the hardship that would have been caused by too sudden an enhancement of those rents, a strict limit was imposed on enhancement, and they were eventually assessed to rents much below those paid by *thāni* or *pāhi* ryots. Altogether 36,400 *nisfi bāziāfti* holdings were recorded with an area of 59,400 acres, and 5,400 *kāmil bāziāfti* holdings with an area of 6,500 acres.

Tanki holdings.

Tanki holdings are those which were formerly held revenue-free, but were subsequently assessed at a quit-rent. They vary greatly in extent; some consist of entire villages, while others are small detached patches of ground measuring a few acres altogether. Originally they were grants assigned for the support of idols, priests, courtiers, members of the royal household, and others who had claims to be supported from the public property. Numerous alienations of this nature were made not only by the Rājās of Khurdā, but by their representatives and by landholders of all descriptions. When, after the invasion and conquest of the Province, the Rājās found their revenue reduced, they began to levy a quit-rent on most, but not all, of such tenures in the *parganas* assigned for their support. Hence, these *tanki* holdings are numerous in Khurdā, which remained in the possession of the Rājās till its conquest by the English, and in the *parganas* of Rāhāng, Lembai, Sirai and Chaubiskud, which were ceded to the Marāthās long after they had taken possession of other parts of the Province. Of those that are now known as *tanki* tenures, the most numerous belong to the Sāsani Brāhmans, *i.e.*, Brāhmans to whom villages were assigned for their livelihood. At the last settlement the rents of these privileged tenants were not disturbed, but excess areas held by them were treated in the same way as those found in the possession of revenue and rent-free holders.

The incidents of the *kharidā jamābandi*, *bāziāfti* and *tanki* tenures are as follows :—

(1) They are heritable, transferable and divisible; but no division of rent is binding on the landlord without his consent. (2) The tenure-holders have the same rights over waste land included in their tenures as zamīndārs have in the waste land

in their estates, *i.e.*, a full right to the jungle produce and to the profits of reclaimed lands. Any lands brought under cultivation in the course of the settlement are liable to assessment at next settlement. (3) The rent payable is fixed for the term of settlement. (4) In default of payment the tenure may be brought to sale under section 105, Act X of 1859 and Chapter XIV of the Bengal Tenancy Act. The balance of the purchase money after paying the arrear rent goes to the defaulter. (5) These tenures do not, on purchase by the zamīndār or other landlord, merge in the superior right, but by the custom of the country survive.

***Thāni* and *pāhi* ryots.**

The great majority of the cultivators consist of tenants known as *thāni* and *pāhi* ryots. At the British conquest it was found that the cultivated lands of the Mughalbandi were tilled by two classes of ryots—*thāni* or resident cultivators and *pāhi* or non-resident cultivators. The *thāni* ryot had a hereditary right of occupancy in his lands, while the *pāhi* ryot was a mere tenant-at-will. The advantages enjoyed by the former were briefly as follows. He held his homestead and garden land rent-free; his *thāni* lands were the best in the village; and he had the preference in the tillage of the remaining *pāhi* area, in the cultivation of rent-free lands, and in the reclamation of new lands. He had communal rights to pasture, fire-wood and thatching grass; he had a hereditary right of occupancy; and he could not be ousted so long as he paid his rent. The possession of these advantages increased his importance in the eyes of his neighbours and strengthened his credit with the *mahājan*. On the other hand, his rent was much higher than that paid by the non-resident ryot, and he groaned under the extra contributions and impositions exacted from him by his landlord. These demands were often so excessive as to swallow up all the profits of cultivation, and the *thāni* ryot, reduced to despair, was often compelled to abandon his home and the doubtful advantages of his position. The *pāhi* ryot paid a much lower rate of rent, but, on the other hand, he was liable to be turned out of his holding at any moment.

The *thāni* ryots now have fixity of rent for 30 years, but otherwise there is nothing to differentiate their status from that of the *pāhi* ryots. The latter have long ceased to be non-resident. They have settled down on their cultivation, and, under the operation of the Bengal Tenancy Act, have become occupancy ryots with all the rights and privileges which that Act has given. The name of the *pāhi* tenant has practically disappeared from the settlement records, as it is held to comprise all the tenants included under the Bengal Tenancy Act as settled, the

holdings of *thāni* ryots and all mixed holdings (*thāni-pāhi*) being excluded.

Thāni-pāhi lands.

The latter term calls for explanation. Besides their ancestral *thāni* lands and the lands temporarily cultivated and paid for at the ordinary *pāhi* rates or in kind, the *thāni* ryots commonly hold a considerable area in their own villages called *thāni-pāhi*. The term is loosely used to designate holdings composed of perfectly separate and distinct *thāni* and *pāhi* lands, for which rents are separately paid, as well as holdings in which the lands are so mixed that the ryot cannot separate them; and it has long been the practice for the landlord to take a lump sum rent for both and to enhance or reduce it as if the whole holding were *pāhi*. In either case separate rents have now been fixed for *thāni* and *pāhi*, and the incidents of the *thāni* tenure have been declared to belong to the *thāni* portion; but when the lands are indistinguishable, the whole is practically the holding of an ordinary settled ryot of the village.

Chāndinā ryots.

Tenants other than the *khusbās* or respectable *thāni* and resident ryots have always paid rent for their homestead lands. In the case of the cultivating classes, such lands were generally part of the *pāhi* holding; but shopkeepers, artisans, and labouring classes, who, having no arable land in the village, pay rent for homestead lands only, are called *chāndinādārs* and their tenure *chāndinā*. *Pāhi* ryots also, who have their home in one village but hold a house or homestead in another, are sometimes known as *chāndinādārs* of the latter village. The term originally implied inferiority, as on this class fell the obligation of supplying forced labour or pasturage when required by Government officials; but this obligation having fallen into disuse, the unpopularity of the term has passed away, and it has come to be used for all homestead land paying rent separately from the arable lands.

Jāgīr and *minhā* lands.

The *jāgīr* lands are service lands granted to various village servants which require no particular description. It will be sufficient to note that homestead and other lands confirmed as tenable without payment of rent at the last settlement were left unassessed; that rent-free grants made by the zamīndārs during the currency of the settlement were assessed to revenue but not to rent; and that the *jāgīrs* of village servants were regranted to them, while those of *chaukīdārs*, *patwāris*, *khandaits*, and *paiks* were resumed and assessed to rent.

Under-tenants.

The under-tenants are divided into four classes—(1) ryots of tenure-holders with rights of occupancy; (2) ryots of tenure-holders with non-occupancy rights; (3) under-ryots with rights of occupancy; and (4) under-ryots liable to eviction for failure to

pay rent or at the end of the year after service of due notice. Nearly all the under-ryots, however, have other lands of their own, held as *pāhi* or *thāni* either in the same or a neighbouring village. Respectable ryots take up and cultivate lands held by Brāhmans or small patches required for sugarcane and tobacco, which the ryot himself cannot or will not grow; and other under-ryots are tenants paying produce rents, who are men of low caste with a position differing but little from that of hired servants. Similarly, the ryots holding under tenure-holders may be divided into respectable ryots cultivating for their own convenience and low-caste men paying produce rents.

CHAPTER XIII.

GENERAL ADMINISTRATION.

ADMINISTRATIVE CHARGES AND STAFF.

THE administration of the district is in charge of the Collector under the Commissioner of the Orissa Division. For general administrative purposes it is divided into two subdivisions with headquarters at Purī and Khurdā. The headquarters subdivision is under the direct supervision of the Collector, who is assisted by a staff of three Deputy Collectors, with two or three Sub-Deputy Collectors; while the Khurdā subdivision is in charge of a Subdivisional Officer, who is assisted by a Deputy Collector and a Sub-Deputy Collector. The Collector is also *ex-officio* Assistant to the Superintendent of the Tributary Mahāls of Orissa and Port Officer for the port of Purī; in the latter capacity he receives notices of accidents to ships for communication to the Local Government, and also collects port dues. The Deputy Collector stationed at Khurdā is Manager of the Khurdā Government estate, while one of the Sub-Deputy Collectors is Manager of the Kotdesh, Kodhār and other Government estates. Among other district officials may be mentioned the officer in charge of the Purī Forest Division, whose headquarters are at Khurdā, and an Inspector of Salt, who is stationed at Purī but goes frequently to Sātparā for inspection along the shores of the Chilkā lake.

REVENUE.

The revenue of the district, under the main heads, increased from Rs. 6,44,000 in 1880-81, when the income-tax had not been imposed, to Rs. 9,16,000 in 1890-91 and to Rs. 11,41,000 in 1900-01. In 1906-07 it amounted to Rs. 12,14,000, of which Rs. 7,41,000 were derived from land revenue, Rs. 2,12,000 from excise, Rs. 1,63,000 from stamps, Rs. 71,500 from cesses and Rs. 26,500 from income-tax.

Land revenue.

The collections of land revenue increased from Rs. 4,64,000 in 1880-81 to Rs. 6,56,000 in 1890-91 and to Rs. 7,74,000 in 1900-01. In 1906-07 they amounted to Rs. 7,41,000 collected from 496 estates. Of these, 489 estates with a current demand of Rs. 2,63,000 are temporarily settled, and 3 estates with a demand of Rs. 10,300 are permanently settled, while there are 4 estates, with a demand of Rs. 4,66,000, held direct by Government.

The next important source of revenue is excise, the receipts from which increased from Rs. 1,39,000 in 1896-97 to Rs. 2,12,000 in 1906-07. By far the greater part of this sum was obtained from the sale of opium, which realized Rs. 1,07,000 or half of the total excise revenue. The people have always been addicted to the use of the drug, and at the present day the consumption of opium is greater than in any other district in Bengal except Midnapore, Hooghly, 24-Parganas, Cuttack and Balasore. There is one shop for the sale of the drug and its preparations to every 26,084 persons, and the amount realized from duty and license fees is Rs. 1,056 for every 10,000 of the population, as compared with the average of Rs. 463 for the whole Province. After opium, the largest receipts are obtained from the duty and license fees levied on *gānja*, *i.e.*, the unimpregnated dried flowering tops of the cultivated female hemp plant (*Cannabis indica*), and the resinous exudation on them; the amount thus realized was Rs. 65,584 in 1906-07. The total incidence of the revenue accruing from hemp drugs is Rs. 648 for every 10,000, and the number of shops licensed to sell by retail is one to every 21,193 persons. A Special Excise Sub-Inspector with a small subordinate staff has been appointed to watch the tracts bordering on the Tributary States for the purpose of suppressing illicit import of *gānja* from Garhjāts. Excise.

The manufacture and sale of country spirit are carried on under what is known as the contract supply system, which was introduced in 1905. Under this system the local manufacture of country spirit has been prohibited, and a contract has been made with the Aska Distillery for its supply. The contractors are forbidden to hold retail licenses for the sale of the spirit, but are allowed the use of distillery and depôt buildings for the storage of liquors. The spirit is brought from the distillery to the depôt at Purī, and is there blended and reduced to certain fixed strengths, at which alone it may be supplied to retail vendors and sold by the latter to consumers. The receipts from license fees and duty on this spirit are less than in any other Bengal district except Balasore and Angul, amounting in 1906-07 to only Rs. 24,091, while the sale of the country fermented liquor known as *tāri* brought in only Rs. 13,462. The fact is that the Oriyā is far from being a hard drinker, and the demand for liquor is so small that it is found sufficient to have one retail shop for every 67,818 persons. The annual consumption of country spirit is not more than four proof gallons per 1,000 of the population; and the receipts from spirits and fermented liquor amount only to Rs. 378 per 10,000, as compared with Rs. 2,147 for the whole of Bengal.

Stamps.

The revenue derived from the sale of stamps was Rs. 88,000 in 1895-96, and averaged Rs. 1,09,000 per annum in the quinquennium ending in 1899-1900. During the five years ending in 1904-05 the annual receipts averaged Rs. 1,43,000, and in 1906-07 they were Rs. 1,63,000, as against Rs. 94,000 in 1896-97. The sale of judicial stamps alone realized Rs. 1,20,000 in 1906-07, as compared with Rs. 64,000 in 1896-97, the increase being due partly to the growth in the number of rent and civil suits, and partly to the fact that mutation fees were taken in the Khurdā Government estate in court-fee stamps, while the previous practice was to take them in cash. There has been a slight increase in the receipts from non-judicial stamps, which rose during the same period from Rs. 30,000 to Rs. 43,000 in consequence of the increase in the number of deeds of sale and mortgages.

Cesses.

Road and public works cesses are, as usual, levied at the maximum rate of one anna in the rupee. The current demand in 1906-07 was Rs. 70,000, of which the greater part (Rs. 47,000) was due from 718 revenue-paying estates, while Rs. 23,000 are payable by 4,857 revenue-free estates. The number of recorded share-holders of estates is 13,600. There are 18,380 tenures assessed to cesses with 18,100 share-holders; and the number of tenures is thus more than three times that of estates. The total annual demand of cesses is nearly equal to one-tenth of the demand of land revenue.

Income-tax.

In 1896-97 the income-tax yielded Rs. 17,000 paid by 630 assessees, and in 1901-02 the amount derived from the tax had increased to Rs. 26,000 and the number of assessees to 958. At that time the minimum income assessable was Rs. 500, but this was raised to Rs. 1,000 in 1903, thereby affording relief to a number of petty traders, money lenders and clerks. The number of assessees has consequently fallen off, and in 1906-07 the tax brought in Rs. 26,488 paid by 556 assessees. In spite, therefore, of the decrease in the number of assessees, due to the exemption from taxation of persons having incomes below Rs. 1,000, the collections have increased, owing to the growth of the income of merchants and grain-dealers which has followed the opening of the railway.

Registration.

There are 4 offices for the registration of assurances under Act III of 1877, one at the headquarters station and the others at Gop, Khurdā, and Piplī. At Purī the District Sub-Registrar deals, as usual, with the documents presented there and assists the District Magistrate, who is *ex-officio* Registrar, in supervising the proceedings of the Sub-Registrars in charge of the other registration offices. In the five years 1895-99 the average number of documents

registered annually was 12,856; in the next quinquennium (1900–04) it was 18,491; and in 1906 the number rose to 19,612, as shown in the marginal statement, which gives the salient statistics for that year. This increase is chiefly attributable to the last settlement, which put into the hands of every ryot a record clearly defining the position and legal status of his holding. With the facilities for transfer which such a record placed in his possession, the ryot naturally resorted more largely to transfer, though the settlement did not confer any new right of transfer. The validity of such transfers still depends upon the consent of the zamīndār, but this is usually given on payment of a bonus of 25 per cent. of the consideration. This restricted right of transfer is fast hardening into a custom, but this is not a matter for anxiety, as the purchasers usually belong to the same class as the sellers.

Name.	Documents registered.	Receipts.	Expenditure.
		Rs.	Rs.
Purī ...	6,308	7,901	3,957
Gop ...	2,974	2,472	1,167
Khurdā ...	3,761	3,879	1,556
Piplī ...	6,569	4,817	1,741
Total ...	19,612	19,069	8,421

With the increase in the number of documents registered there has been a corresponding increase in the receipts and a considerable surplus over the expenditure. The average annual receipts during the quinquennium 1895–99 were Rs. 13,000 and the expenditure was Rs. 7,000; in the 5 years ending in 1904 the average was Rs. 17,000 and Rs. 9,600 respectively; and as shewn above, the receipts were Rs. 19,069 and the expenditure Rs. 8,421 in 1906.

ADMINISTRATION OF JUSTICE. Civil justice.

The judicial staff entertained for the administration of civil justice consists of two Munsifs stationed at Purī, who are subordinate to the District and Sessions Judge of Cuttack. In recent years there has been a considerable increase in the number of civil suits instituted, owing to the settlement concluded in 1899, the opening of the railway, the general growth of trade, and the consequent development of business relations. The increase in the number of rent suits, in particular, has been very noticeable. This is attributed chiefly to the fact that the land revenue demand having been enhanced at the last settlement, the zamīndārs cannot now afford to allow large arrears to remain outstanding, as they were accustomed to do when they enjoyed larger profits. Also, the settlement records have given increased facilities to the zamīndārs to prove the area and annual rental of the tenants' holdings, which were formerly subjects of dispute that many

zamīndārs shrunk from bringing before the Courts, as they had no thoroughly reliable records of their own. The issue is now practically confined to the amount of the arrears, and consequently the majority of suits are uncontested.

There is also another reason why the landlords have been compelled to resort more largely to civil suits since the settlement. Formerly the poorer *pāhi* or non-resident ryot was a mere tenant-at-will, who was summarily evicted if he fell into arrears with his rent, and any man willing to pay the balance of rent was installed in his place. Armed with the record of rights, the poorest tenant can now successfully resist this form of tyranny, and the results of many criminal cases have taught the landlord that a suit in the Revenue Court is a much safer means of realizing arrears of rent than forcible dispossession of the defaulter or illegal distraint of his crops. The increase of rent suits is, at least to this extent, a healthy sign of the development of tenant right, and the fact that this increase has been accompanied by a diminution in the proportion of contested cases shows that there is yet no tendency on the part of the tenant to throw designed obstacles in the way of the landlord.

Criminal justice. Criminal justice is administered by the District Magistrate and the Magistrates subordinate to him. The sanctioned staff at Purī consists, in addition to the District Magistrate, of two Deputy Magistrates of the first class and one Deputy Magistrate of the second or third class. Besides these officers, one or two Sub-Deputy Magistrates with third class powers are generally posted to the headquarters station. The Subdivisional Officer of Khurdā is almost invariably a Magistrate of the first class, and is generally assisted by a Sub-Deputy Magistrate vested with second or third class powers. In addition to the stipendiary Magistrates, there are benches of Honorary Magistrates at Purī, Khurdā and Bhubaneswar. One or more of the Honorary Magistrates at Purī may sit with any salaried or Honorary Magistrate appointed by the District Magistrate and form a bench for the trial of offences committed in the headquarters subdivision.

Crime. The Oriyās are generally a law-abiding people. Organized crime by professional criminals is almost unknown, and has hitherto been confined to occasional drugging and robbing of pilgrims on the Jagannāth Road and to an occasional dacoity. The country has now been opened by the railway, and it is feared that the peace hitherto enjoyed may be disturbed by foreign criminals. Recently the settlement has had a disturbing influence upon the relations of landlords and tenants and upon the economic condition of the country generally; while high prices and the influx of

foreigners, as well as the introduction of railway communication, are also causes which have had some effect upon criminal statistics. There is no crime which can be described as characteristic of the district, but infanticide is unusually common. In the ten years 1896-1905 there were 11 cases of infanticide, a higher number than in any other district of the Province, except Shāhābād and Sāran. In 1903 a case of human sacrifice occurred. A man, who was a follower of one of the degenerate forms of the Tāntric faith and had obtained a reputation for occult knowledge, induced three boys, who had attached themselves to him as his disciples, to sacrifice another boy as an offering to the goddess Aghortārā; the belief being that the goddess, propitiated by the offering, would grant them the fulfilment of all their desires. The body was never found.

POLICE.

For police purposes the district is divided into 6 thānas or police stations. Two are located at Purī, one being the Purī town thāna and the other the Purī Sadar thāna. The other four are at Khurdā and Bānpur in the Khurdā subdivision and at Piplī and Gop in the headquarters subdivision. In addition to these thānas, there are 15 outposts, as shown in the margin: Brahmagiri, it should be explained, is treated as a thāna for purposes of crime investigation, but not for other adminstrative purposes, such as the taking of the census. The regular police force consisted in 1906 of the Superintendent of Police, 5 Inspectors, 34 Sub-Inspectors, 41 Head-Constables, and 405 constables, and there was one police-man to every 5 square miles and to every 2,093 of the population. The rural police force is composed of 1,609 *chaukīdārs* and 166 *dafadārs*, and there is one *chaukīdār* to every 602 inhabitants.

Thānas.		*Outposts.*
Purī Sadar	...	Satyabādī.
		Kanās.
		Krishnaprasād.
		Brahmagiri.
Piplī ...	...	Bāliantā.
		Nimāparā.
		Delāng.
		Bālipātnā.
Gop ...	...	Kākatpur.
Khurdā	..	Gobindpur.
		Jankiā.
		Bolgarh.
		Bhubaneswar.
Bānpur	...	Sunākhalā.
		Tāngi.

JAILS.

There is a district jail at Purī and a subsidiary jail at Khurdā. The latter has accommodation for 10 prisoners; it is merely a lock-up, all but short-term prisoners being sent to the district jail at Purī. The district jail has accommodation for 155 prisoners, viz., for 92 male convicts, 10 female convicts, 6 juvenile convicts, 32 under-trial prisoners, and 2 civil prisoners, while there are cells for five prisoners and a hospital with beds for 8 patients. The industries carried on in the jail are oil-pressing coir-pounding and the making of coir yarn.

CHAPTER XIV.

LOCAL SELF-GOVERNMENT.

DISTRICT BOARD. OUTSIDE the municipality of Purī the administration of local affairs, such as the management of roads, pounds and ferries, the control of dispensaries and the provision of sanitation, rests with the District Board, assisted by the Local Boards constituted for each subdivision. The District Board consists of 13 members, of whom three are nominated by Government and six are elected, while four are *ex-officio* members. Its average annual income during the 10 years ending in 1901-02 was Rs. 61,000, of which Rs. 31,000 were derived from Provincial rates ; and the average annual expenditure was Rs. 60,000, of which Rs. 26,800 were spent on civil works, Rs. 18,500 on education, and Rs. 4,500 on medical relief. In 1906-07 its income was Rs. 89,000 (excluding an opening balance of Rs. 35,000), the principal receipts being Rs. 33,000 derived from rates, Rs. 24,000 contributed by Government, and Rs. 20,800 obtained from civil works. The expenditure in the same year was Rs. 84,000, of which Rs. 44,000 were spent on civil works, Rs. 25,500 on education, and Rs. 9,000 on medical relief. The incidence of taxation is light, being only six pies per head of the population.

The District Board maintains 248 miles of road, of which 108 miles are metalled and 140 miles are unmetalled, besides a number of village roads with an aggregate length of 137 miles; the cost on maintaining these roads in 1906-07 was Rs. 126, Rs. 50 and Rs. 7 per mile respectively. The Board also keeps up 32 pounds, which bring in an income of Rs. 3,400. Its educational expenditure is devoted to maintaining 9 Middle schools, and to aiding 1 High school, 10 Middle schools, 30 Upper Primary schools, 719 Lower Primary schools and 1 other school. The District Board, it may be mentioned in this connection, has sanctioned a schoolarship of Rs. 15 a month for the education of a deaf-mute at the Calcutta Deaf and Dumb School, and entertains a peripatetic gymnastic teacher and a peripatetic *darzi* for teaching sewing in girls' schools. It also maintains four dispensaries, and in 1906-07 altogether 8·7 per cent. of its ordinary income was expended on medical relief and sanitation.

Local Boards have been constituted for the headquarters and Khurdā subdivisions. The system of election which obtains in some parts of Bengal has not been introduced, and the members are nominated by Government. The Purī Local Board consists of 8 members, of whom 7 are nominated and 1 is an *ex-officio* member; and the Khurdā Local Board has 12 members, of whom 11 are nominated and 1 is an *ex-officio* member. The functions of these bodies are unimportant, consisting mainly of the administration of village roads and the control of pounds and ferries. LOCAL BOARDS.

The Purī Municipality is the only municipality in the district. It was established in 1881, and its affairs are administered by a Municipal Board, consisting of 15 members, of whom 3 are nominated, and 10 are elected, while 2 are *ex-officio* members. The area within municipal limits is 4·03 square miles, and the number of rate-payers is 5,867 or 19 per cent. of the population. The average annual income for the decade ending in 1901-02 was Rs. 44,000 and the expenditure was Rs. 36,000 per annum. In 1906-07 the income was Rs. 64,000, the main sources of income being a tax on houses and lands, levied at 7½ per cent. on their annual value, which brought in Rs. 20,000. There is also a conservancy rate, levied according to the valuation of holdings at 5 per cent., which realized Rs. 13,000; Rs. 3,000 were obtained from a tax on animals and vehicles, while the fees and revenue from markets brought in Rs. 6,000. The total income from municipal rates and taxes was Rs. 36,000, and the incidence of taxation was Re. 1-1 per head of the population. The expenditure in the same year was Rs. 61,500, of which Rs. 18,000 or 29·6 per cent. were spent on conservancy, and Rs. 15,000 or 23·7 per cent. on medical relief, a higher percentage than in any other municipality in Orissa except Balasore. MUNICIPALITIES.

The administration of the Purī Municipality is always a matter of difficulty, owing to the influx of pilgrims throughout the year and to the multitudes which attend the great religious festivals. The most pressing needs of the town are an efficient scheme of drainage, a supply of good drinking water, the improvement of latrines and cess-pools, the improvement of the lodging-houses, and the proper lighting of the streets. The finances of the municipality are insufficient to enable it to carry out these reforms, and their execution depends on the liberality of Government. Steps are being taken to carry out a complete drainage scheme; and the land required for a pumping station in connection with the water-supply scheme has been acquired.

CHAPTER XV.

EDUCATION.

PROGRESS OF EDUCATION. NOTHING perhaps illustrates the progress of Orissa under British rule more clearly than the history of the spread of education among its people. The contrast between the low estimation in which early observers held their intellectual capacities and the standard which they have now reached is very striking. Orissa was described as the Bœotia of India, and its people as equally ignorant and stupid. It was cited as a proof of the poverty of their qualifications that the principal official posts had to be filled by foreigners; and it was stated that it was impossible to find Oriyās of sufficient ability for positions of responsibility and trust. When we first acquired the Province in 1803, there was scarcely a single native of Orissa in Government employ. The language of the courts and public offices was Persian, and it was not till 1805 that orders were passed that in all written communications with the natives of the Province the subject should be written in Oriyā as well as in Persian. This order necessitated the employment of Oriyā *muharrirs*, who, though skilful enough with their iron pen and bundle of palm-leaves, were almost helpless when required to write on paper with an ordinary pen. They are said to have been slow in acquiring any facility in this method of writing, ignorant of business in general, and especially of the new English method of revenue accounts. All the best ministerial appointments were consequently in the hands of Bengali clerks, who, attracted by the high pay that had to be offered to procure the requisite standard of efficiency, left their homes in Bengal, and bringing their families with them, settled in the Province and became naturalized Oriyās. Matters appear to have improved, but slowly, as time went on; and in 1821 the Magistrate reported:—"Scarcely a single real Oriyā receives a salary of more than Rs. 10 per mensem, but several are naturalized Bengalis or Musalmāns. I always give a preference to Oriyās, but at this moment I scarcely know a single Oriyā possessing qualifications to fit him for being a common *muharrir*."

The backwardness of education in Orissa during the first half century of British rule has been graphically described by Sir

William Hunter:—"Government," he wrote, "not less than the missionaries, long found itself baffled by the obstinate orthodoxy of Orissa. Until 1838 no schools worthy of the name existed except in the two or three little bright spots within the circle of missionary influence. Throughout the length and breadth of the Province, with its population of 2½ million of souls, all was darkness and superstition. Here and there, indeed, a *pandit* taught a few lads Sanskrit in a corner of some rich landholder's mansion; and the larger villages had a sort of hedge-school, where half a dozen boys squatted with the master on the ground, forming the alphabet in the dust, and repeating the multiplication table in a parrot-like sing-song. Any one who could write a sentence or two on a palm leaf passed for a man of letters. In 1838 Government entered the field, and opened an English and a Sanskrit school at Purī. But these institutions proved altogether unable to make head against the tide of ignorance and bigotry and presently sunk beneath the flood. In 1841 we opened a higher class English school at Cuttack, which after a long series of conflicts and discouragements still survives as the principal seat of education in the Province. During Lord Hardinge's administration two vernacular schools were set agoing in 1845; another one in 1848; and in 1853 an English school was founded in Balasore, while the one at Purī was resuscitated. In 1854 arrived the famous Educational Despatch which was to bring western enlightenment home to the eastern races. Yet for several years afterwards, the increase of schools throughout vast Provinces like Orissa has still to be counted by units. In three great Government estates (Khurdā, Bānki and Angul) we managed between 1855 and 1859 to set on foot 19 elementary schools; but in the latter year the total number for all Orissa, with close on three millions of people, amounted to only 29. The truth is the whole population was against us. Such little success as our schools obtained they owed, not to the Oriyās themselves, but to the Bengali families whom our Courts and public offices brought into the Province. Thus, of the 58 Orissa students who up to 1868 reached even the moderate standard exacted by the Calcutta University at its Entrance Examinations, only 10 were native Oriyās, while 48 belonged to immigrant families."

The Brāhmans, with the Karans, had hitherto held the monopoly of education. They kept it strictly in their own hands; and caste prejudice and religious superstition were great obstacles in the way of progress. The Government schools were looked upon as infidel inventions; and even as late as 1860, a learned Oriyā, on being appointed to the orthodox post of Sanskrit teacher in the Purī

school, was excluded for a year or two from the Brahmanical orders, and stormy discussions took place as to whether he should not be formally expelled from his caste. In spite, however, of such opposition, State education slowly, but surely, made its way in Orissa. In 1848-49 there were but 9 schools, with a total attendance of 279 pupils, out of a population of 3 million souls; but during the next ten years the number of schools increased to 29, and of pupils to 1,046; while at the close of the third decennial period, *i.e.*, in 1868-69, there were 63 schools with 4,043 pupils.

Until 1869, however, no machinery existed in Orissa for training teachers, and the lack of qualified instructors was one of the greatest difficulties experienced in establishing and maintaining schools. In that year Government opened a Normal school in Cuttack town, at which young men were instructed with the object of qualifying them to become teachers in their turn. On the conclusion of the course of training, these young men dispersed through the Province, and settling in the villages, did much to bring education home to the ignorant peasantry. Each teacher collected as much as he could in money and rice from the villagers who sent their children to his school, and received a small weekly stipend from Government so long as he discharged his duty properly. A considerable number of schools of this sort were gradually opened, and no measure was more successful in popularizing education.

GENERAL STATISTICS.

The contrast between the present state of affairs and that depicted above is very remarkable. In 1872-73, when the diffusion of vernacular education was first taken systematically in hand by extending the grant-in-aid rules to hitherto unaided schools, there were only 112 schools in the Purī district attended by 2,802 pupils; in 1875, when this scheme was fully in operation, there were 182 schools and 4,155 pupils, representing one school to every 13½ square miles and 4 pupils to every thousand of the population. According to the returns for 1906-07, the district now contains altogether 1,489 public educational institutions, at which 25,007 pupils receive instruction, besides 712 private institutions, *i.e.*, schools which do not observe departmental standards, attended by 4,273 pupils. Altogether, 26,039 boys are educated, representing 34·2 per cent. of the number of boys of school-going age, and there are 3,241 girls at schools. At the census of 1901, 6·2 per cent. of the population of Purī (13·9 males and 0·4 females) were returned as able to read and write. The inspecting staff consists of a Deputy Inspector of Schools, 9 Sub-Inspectors, 2 Assistant Sub-Inspectors and 13 Inspecting Pandits.

There is no college in the district. There are altogether 22 secondary schools attended by 1,380 pupils, as against 974 in 1891-92. Of these schools, 2 are High schools, 8 are Middle English schools, and 12 are Middle Vernacular schools. The two High schools are the Purī Zilā school, maintained by Government, which has 216 pupils on the rolls, and the Khurdā High school, which is an aided school with 173 pupils on the rolls. At the Middle English schools instruction is given to 527 pupils, and at the Middle Vernacular schools to 464 pupils. Schools of the latter class are on the decrease, the tendency being to convert them into Middle English schools. SECONDARY EDUCATION.

There were 1,391 Primary schools for boys and 52 Primary schools for girls in 1905-06, at which instruction was given to 27·5 per cent. of the male and 4 per cent. of the female population of school-going age. Of the total number of boys' schools of this class, 72 are Upper Primary and 1,319 are Lower Primary schools. There has been a marked increase in their number since 1891-92, when it stood at 1,097, and there has been a corresponding increase in the number of pupils, which has risen from 14,265 to 21,983, *i.e.*, by over 50 per cent. This increase is the more satisfactory, as recently it has been found necessary to close a number of schools in the tracts bordering on the Chilkā lake, which have suffered from inundation and consequent poor harvests. PRIMARY EDUCATION.

Two subdivisional training schools have been established since 1902-03 for the training of *gurus* or Primary school teachers. There are 6 *maktabs* and 16 Sanskrit *tols* recognized by the Education Department. The most important of these is the Purī Sanskrit school, which is endowed and maintained by the Rājā of Balarāmpur in Oudh. It is said that this school marked the first attempt to educate the Purī Brāhmans, and that before its establishment there was not a Brāhman in the English school. There are also 712 private institutions, including unrecognized *maktabs*, Sanskrit *tols*, and *pāthshālās* attended by less than 10 pupils; a large number have in recent years been absorbed in the departmental system. SPECIAL AND OTHER SCHOOLS.

At the close of the year 1906-07 there were 52 Primary schools for girls, as compared with 17 schools of this class ten years before. They include two model Primary girls' schools at Purī and Bhubaneswar, and all are dependent for their maintenance on public funds. The number of girls studying in Primary girls' schools is 1,168, including 1,131 Hindus, 32 native Christians and 5 Muhammadans. Altogether 3,241 girls are receiving instruction in schools of every class, no less than 2,073 or 63 per cent. FEMALE EDUCATION.

attending boys' school, a fact which seems to shew that the Oriyā is not prejudiced against co-education.

MUHAMMADAN EDUCATION.

According to the statistics of the census of 1901, 13·9 per cent. of the males and 0·4 per cent. of the females of the total population are literate, *i.e.*, are able to read and write. In the case of Muhammadans the proportion is 11·7 and 0·3 per cent. respectively; so that it appears that, as a class, Muhammadans are not so well educated as other sections of the community. On the other hand, the educational returns shew that in 1906-07 the percentage of Muhammadan pupils to pupils of all creeds was 2·3 per cent., whereas Muhammadans account for only 1·7 per cent. of the population. They form a very small minority in Purī, and the number studying at public schools is only 676.

EDUCATION OF ABORIGINALS AND LOW CASTES.

Three Lower Primary schools have been opened for the education of the aboriginal Khonds, who are found chiefly in the Bānpur thāna; these schools are attended by 60 Khond children. The low castes consist of the Bauris, Kandrās, Dhobās, Hāris and Nuliyās, of whom 497 are at school. Two Lower Primary schools have been started specially for the Nuliyās, a low caste of fishermen. It is reported that, though there is no very strong feeling against the admission of low caste children in Primary schools, they are not allowed to mix with children belonging to the higher caste; they have to sit apart from them and they are generally made to sit in the verandah of the school building.

CHAPTER XVI.

GAZETTEER.

Atri.—A village situated in *zilā* Kuspallā, 8 miles from Khurdā. Here a hot spring bubbles up from the ground in the midst of paddy fields; a strong odour of sulphuretted hydrogen pervades the locality, but beyond the smell, no signs of sulphur are perceptible. The soil at the spring, and for a considerable distance round it, is composed of alluvium, or of marl and laterite. Oriyā pilgrims gather here on the Makar Sankrānti day in January, in the belief that the spring has the miraculous power of removing the curse of barrenness from any woman who bathes in its waters on that day.

Bālukhand.—A Government estate, having an area of 575 acres, and forming part of the civil station of Purī. The land formerly belonged to a private estate, but in 1876 it was decided to extend the area of the land occupied by public buildings, and a plot of land, measuring 548 acres, was acquired at a cost of Rs. 2,120, in addition to 29 acres already in the possession of Government. The land was paid for from the Town Improvement Fund, which, on the formation of a municipality at Purī, merged in the Municipal Fund. In 1885 it was decided that Government should retain direct control of the land; and the purchase-money was therefore refunded to the municipality, and the land became Government property, known as the Bālukhand estate. It now contains the Government offices and the residences of its officers; the rent-roll is Rs. 8,000 per annum. The area assigned for masonry buildings is very small, and consequently a high rent of Rs. 150 per acre has been fixed for land near the shore, in order to prevent over-crowding.

Bānpur.—A village situated in the extreme south-west of the Khurdā subdivision, 3 miles north-west of the Bālugān railway station, with which it is connected by a good metalled road. It contains a temple dedicated to Bhagavatī, the presiding deity of the Bānpur Māls, which is visited by pilgrims from the Ganjām

This chapter has been written in collaboration with Bābu Monmohan Chakravarti, M.A., B.L., Assistant Superintendent, Gazetteer Revision, Bengal.

district and the Tributary States of Nayāgarh and Ranpur. The temple stands on the edge of a deep but dirty pool within a high enclosure wall. The village also contains a police station, a dispensary and a *tahsīl* office for the management of the Bānpur thāna, which forms part of the Khurdā Government estate. Some of the most fertile lands in Orissa lie in its neighbourhood, but the place has the reputation of being very unhealthy.

Barāl.—A village in the Purī subdivision, situated on the Trunk Road, 18 miles north of Purī town. It contains a temple which is visited by Hindus of all classes, but mainly by those who desire to be blessed with children or who are suffering from some lingering disease. The temple has endowments of rent-free lands in almost every part of Orissa, which have been granted for the maintenance of the sacred Siva linga.

Bārunai Hill.—A hill situated one mile south of Khurdā town with an altitude of 1,000 feet above sea-level. It is a saddle backed hill, rising into bare and often inaccessible precipices, and extends over an area of two square miles. A large portion of the hill has been reserved and planted with teak, which grows luxuriantly; leopards, wolves, bear and deer are found in the jungle covering it. There are some interesting remains, of which an account will be found in the article on Khurdā.

Bhubaneswar.—A village in the Khurdā subdivision, situated in 20° 15′ N. and 85° 50′ E., 2 miles south of the Bhubaneswar railway station, 18 miles south of Cuttack, and 30 miles north of Purī town. Popularly the name is used not only for Bhubaneswar, but also for the village of Kapilaprasād and for part of Bargad, the boundary running from the Rāmeswar temple on the north to the Kapileswar temple on the south, and from the District Board bungalow on the west to the Brahmeswar temple on the east. Bhubaneswar, as thus defined, has a length of 2 miles and a breadth of 1¾ miles, and its area is 3½ square miles. The sacred precinct (*kshetra*) is much larger, extending in a circle round the temple of Lingarāj, from Khandāchala (Khandagiri hills) on the north-west to the Kundaleswar temple near Tankapāni village on the east, and from Valahādevī's temple near Miyāpalli village on the north to the Vahirangeswar temple at the Dhauli hills on the south. This wider area, however, is rarely circumambulated by pilgrims. According to the census of 1901, the population is 3,053; it is almost exclusively Hindu, and a large proportion consists of Brāhmans and priests.

The place is built on rocky soil, composed of laterite with occasional small mounds of sandstone. On the east the laterite is covered largely by alluvium, on which are grown rice or *rabi*

crops; but on the north and west the country is fairly well wooded. In Bhubaneswar itself there is only one road worthy of the name, the Bara Dānda, over which once a year the god's car is pulled from the Lingarāj temple to the temple of Rāmeswar, a distance of over a mile; but there is a good road leading to the railway station and a fair one to the Khandagiri hills. There are five monasteries (*maths*), all non-Vaishnavite, the inmates being Saivas and Sannyāsis. As there is no local trade, the shops are poor and few in number, chiefly supplying ordinary food, grocery, etc., to the villagers and pilgrims. The place becomes very hot in summer on account of the rocky formation of the soil, but is otherwise healthy; it enjoys a mild, but bracing, winter, and is not unpleasant during the rains. Good spring water is obtainable, and the water of the Kedāra Gaurī spring is recommended by some for dyspepsia.

The village contains a dispensary, Middle English school, police outpost, post office and *Kānungo's* office, while the District Board and the Public Works Department have each a small bungalow. The Lingarāj Temple Committee have a *kachahri* close to the temple, where there are also a few lodging-houses. The Purī Lodging-House Act has been extended to the place, and the doctor in charge of the dispensary is its Health Officer. It is visited by pilgrims on their way back from Purī, but more frequently on their way to that place. There are no statistics showing the number of such pilgrims, but they are very much fewer than those visiting Purī—not even, in fact, a quarter of the number. They also stay a far shorter time here, generally for a few hours only, and rarely more than a day. The priests, therefore, get but little in the way of offerings, and crowd round a visitor in order to get even a few annas; a score or so of them may generally be found loitering on the station to meet the trains, and they will run with the pilgrims for miles to secure their patronage. Being poor, these priests are unable to organize any system of recruiting pilgrims such as that of Purī, and have to be satisfied with the leavings of the Purī *pandās*.

Historically and architecturally Bhubaneswar is one of the most interesting places in India. Important remains are found close by at Dhauli and Khandagiri an account of which will be found in the articles on these places; and in Bhubaneswar itself there are still about one hundred temples and a score of tanks, which testify to its former importance. A full account of these is beyond the scope of this work, and a brief description of a selected few is all that can be attempted.

Lingarāj. The largest and the most important temple is that of Lingarāj, otherwise called Kruttivāsa, Bhubaneswar or Tribhubaneswar. It covers an area of 4½ acres, and is surrounded by a high thick wall of laterite, oblong in shape, measuring 520 feet by 465 feet. This wall is pierced by three gates on the north, south and east, the largest being that to the east, which is 31 feet broad, is guarded by two lions, and is capped by a pyramidal roof 50 feet high. The courtyard inside is flagged with stone, and is crowded with 60 to 70 side temples, some of which would rank outside as main temples. The biggest of them is the temple of Bhagavatī, wife of Siva, in the north-west corner. It consists of a tower, 54 feet high, and a porch, joined by a long lobby. All three are elaborately sculptured in a rich florid style, the statuettes, bas-reliefs and bands having a picturesque effect from the reddish colour of the sandstone used.

The main temple consists of four structures, viz., beginning from the east, the refectory hall, the dancing hall, the porch and the tower. The refectory hall is 56 feet square, and has four square pillars inside. It was apparently colonnaded, with a large opening to the east to serve as an entrance, but the colonnades were subsequently closed up, making the open hall a dark room, for keeping *bhogas* in. Adjoining it is the dancing hall, which has a sloping roof with a flat top, supported on four pillars and iron beams. Next comes the porch, measuring 65 feet by 45 feet, on a plinth 12 feet high. It is ornamented with pilasters that divide the surface into niches filled with alto-relievo figures of men, women and lions. The body is nearly cubical, and is richly decorated with carvings, a few of which are obscene. It had originally one door to the east and two windows, but four bars of the south window were removed and a new door made, apparently because the light was found insufficient and an additional exit became necessary. The eastern door has sandal-wood panels, delicately carved and strengthened with brass bosses. The porch roof is pyramidal with receding ledges, and is capped by two ribbed domes, one over the other. It is supported inside by four massive pillars, 30 feet high, but additions have been made to the two front ones converting them into walls. The lower ledges of the roof are covered with numerous figures of horses, elephants and men in procession, said to represent the war-scenes of the Mahābhārata.

Last comes the great tower. Its plinth is a continuation of the porch plinth, 12 feet high, and is decorated in a similar manner. On this rises the body of the tower, which is 66 feet square and is nearly cubical in shape. The outside surface is

divided into niches. On each façade, except the east, are central niches containing life-size images of Bhagavatī the wife of Siva on the north, of Kārttikeya his elder son on the west, and of Ganesha his younger son on the south. Two side projections contain four niches, while a corner projection contains two more. The lower corner niche and one lower side niche contain images of the Lokapālas, the eight guardians of the quarters; the other lower side niche contains a domestic scene in bas-relief. The three upper niches contain images of deities, heavenly nymphs, or pairs of human beings. Between the niches are deep recesses, with figures of heavenly nymphs, and below is a lion rampant on an elephant alternating with an elephant standing on a lotus. The niches have side pilasters exquisitely carved with foliage between dotted lines.

Over this body rises a tapering spire, which has a small window near the top. It is divided horizontally into sections and vertically into ribs. The vertical ribs consist of a projecting central broad rib, two side ribs one on each side of this, and a corner rib. The central rib has, at about one-third of its height, a carving of Kīrttimukha resembling a coat of arms, flanked on each side by a female musician, over which projects into the air a lion rampant on an elephant; the lion on the façade adjoining the porch is put at a much greater height than those on the other façades. The side ribs are covered with miniature temple forms from base to top. In the corner rib to every five ordinary sections is a dome-shaped (*āmalakī*) section marking the storeys of the temple. Altogether, there are 70 horizontal sections in the ribs. The spire top, which is flat, is closed by long stone beams and a cylindrical neck, which, aided by four lions crouching on their haunches and four she-goblins, holds up a big 64-ribbed dome, and above it a jar-shaped pinnacle. This dome, it may be explained, is an architectural necessity, as it serves to prevent the stones of the horizontal arches falling inward. Into the pinnacle is fixed a massive metallic trident, the emblem of Siva, which was originally three-pronged, but one curved prong is now broken. The pinnacle is 160 feet above the courtyard pavement. The tower has a double casing of stone, the outer carved, and the inner one plain. The walls are very thick, and the sanctuary inside is only 42 feet square. The god is represented by a large natural block of stone, rising some 8 inches above the ground and about 8 feet in diameter. It is encircled by a stone rim drawn to a point on the north side, representing the female organ (*yoni*). Such a representation of the god is called a *svayambhu*

or natural linga to distinguish it from the artificially made cylindrical lingas.

Date of Lingaraj.

The general features of the temple thus briefly described above are of importance architecturally, as they have been adopted, with more or less elaboration, in subsequent Orissan temples, and have, in fact, become stereotyped as the proper style of architecture for that class of buildings. Even in Bhubaneswar, with the exception of a small group of an earlier date and type, it largely influenced the other temples and ultimately superseded every other variety. According to the palm-leaf chronicles, Yayāti Kesarī began the construction of the temple, and his great-grandson Lalāta Kesarī completed and consecrated it in Saka 588 (A. D. 666-7). But the architectural details do not support this early date; and other versions in the chronicles say that the old temple having become dilapidated, Kolāvatī, queen of Sankalpa *alias* Vasukalpa Kesarī, raised a new temple to Kruttivāsa. An inscription, which may be attributed to the tenth century A. D., mentions Kolāvatī as mother of Udyotaka Kesarī; and this later date is supported by the general nature of the architecture. The tower and the porch appear to be contemporaneous, and the colonnaded hall in front may have been built at the same time; but its conversion to a close dark room for keeping the larger *bhogas* must be subsequent. The dancing hall is said to have been erected in the twelfth century, but is probably later, as royal inscriptions of the thirteenth century are found on the jambs of the porch door, and would scarcely have been placed in a place darkened by the hall. There are no data from which the period of the construction of the side temples can be ascertained; but it is reasonable to conjecture that the temple of Bhagavatī was erected along with the main temples, and its fine carvings support the belief that it was built at a fairly early date.

Ritual.

The daily service consists of twenty-two ceremonial rites, closely resembling those of Jagannāth:—(1) At early dawn bells are rung to rouse the god from his slumbers, and the door of the sanctum is opened; (2) a lamp with many wicks is waved in front of the stone (*ārati*); (3) the god's teeth are cleaned by pouring water and rubbing a stick about a foot long on the stone; (4) the deity is washed and bathed by emptying several pitchers of water on the stone; (5) the god is dressed by putting clothes on the stone; (6) the first breakfast (*ballabha*) is offered, consisting of grain, sweatmeats, curd, and coconuts; (7) the god has his principal breakfast (*sakāla*) when cakes and more substantial viands are served; (8) a kind of light lunch is offered; (9) the god has his regular lunch; (10) the mid-day *bhoga* or dinner is served,

consisting of curry, rice, pastry cakes, cream, etc., while a priest performs *ārati*, *i.e.*, waves a many-flamed lamp and burns incense before the stone; (11) after this, the god has his afternoon siesta, and the doors are closed until 4 P.M., when strains of noisy discordant music rouse him from his sleep; (12) a simple meal, consisting of *jilāpi* (sweetmeats) is offered; (13) the afternoon bath is administered; (14) the god is dressed as in the morning; (15) another meal is served; (16) another bath is administered; (17) a full dress ceremony takes place, when fine costly vestments, yellow flowers, and perfumery are placed on the stone; (18) another offering of food follows; (19) after an hour's interval, the regular supper is served; (20) five masks and a *damaru* are brought in and oblations made to them; (21) another *ārati* or waving of lights is performed before bedtime; (22) a bedstead is brought into the sanctuary and the god composed to sleep, after which the door is closed.*

Festivals. This anthromorphizing of the divinity, the bringing of the godhead to man by representing him with human functions, is further traceable in the festivals. According to the oldest guide-book, the *Kapila-samhitā*, which probably dates back to the fourteenth century, the chief festivals of the Lingarāj are seven in number :—(1) *Prathamāshtamī* (colloquially *Parhuāshtamī*), celebrated on the 8th *tithi* of the dark half of Mārgasīrsha (November-December). The god, represented by a proxy, is taken to the temple of Varuneswar on the north bank of the Pāpanāsinī tank, close to the present dispensary, and is there feasted. The proxy is a small brazen image called Chandra sekhara, which is kept in a small temple close to the south door of the porch. This ceremony is peculiar to Orissa. (2) *Māgha-saptamī*, celebrated on the seventh *tithi* of the bright half of the month of Māgha (January-February). The proxy of the god is taken in procession to the temple of Bhāskareswar and there feasted with offerings of sesamum (*til*). (3) *Kapila-jātrā* celebrated on the first Saturday of the bright half of the month of Phālguna. The proxy is taken, with all his paraphernalia, to the temple of Kapileswar, given a bath in the Kapilahrada tank, and then feasted. (4) *Asokāshtamī* (colloquially *Oskāshtamī*), the Car Festival of Lingarāj, is held on the 8th *tithi* of the bright half of the month of Chaitra (March-April). The god's proxy is seated on a car, 21 cubits high, with four wheels, and is pulled over the main road (Bara Dānda) to the temple of Rāmeswar a little over

* Monier Williams, *Religious Thought and Life in India* (1883), pp. 39-94; R. L. Mittra, *Orissa* (1880), Vol. II, pp. 76-77.

a mile away, is there feasted and worshipped, and then brought back. Locally, this is regarded as the most important of all the festivals at Bhubaneswar. (5) *Damana-bhanjikā*, held on the fourteenth *tithi* of the bright half of the month of Chaitra. The proxy is taken to the temple of Tīrtheswar near the Vindusāgar tank, and there worshipped with offerings of thyme (*dayanā*). This festival is unknown in Bengal, but is observed in the south. (6) *Parasurāmāshtmī* is observed on the eighth *tithi* of the bright half of Ashādha (June-July), when the proxy is taken to the temple of Parasurāmeswar and there feasted. This festival also is unknown in Bengal. (7) *Yama-dwitiyā* is celebrated on the second *tithi* of the bright half of the month of Kārttika (October-November). The proxy is carried to the temple of Yameswar on the west and there feasted.

Besides the above festivals, there are 19 *jātrās*, which were probably omitted from the *Kapila-samhitā* because they were considered of minor importance.

Offerings. The various offerings to the god in the temple become *mahāprasād*, and have the same value as the *bhogas* of Jagannāth temple. The virtues of Bhubaneswar *mahāprasāds* have been dilated upon in the *Siva Purāna* and *Kapila-samhitā*; and a similar sanctity is claimed for the offerings of the Vāsudeva temple on the east bank of the Vindusāgar tank.

Establishment. The temple establishment consists of:—(1) *pandās* or priests, who carry on the worship of Lingarāj or his proxy, and perform the ceremonies connected with *bhogas*; (2) *badus* and *mālis* or gardeners, who decorate the linga and the proxy, and present the flower garlands, etc., necessary for the worship; (3) *suārs* or cooks, who prepare the rice, pulse, cakes, etc., and place them before the idol for *bhoga* offerings; (4) *chasās* or husbandmen, who pull the cars or carry the *vimāna* (a sort of palanquin) of the proxy. Formerly the temple was under the superintendence of a *parichhā* or honorary inspector; but in consequence of mismanagement and frequent quarrels with the priests, the District Judge took charge of it under the Civil Procedure Code, and placed the superintendence in the hands of a Committee.

Other temples. Unlike Purī, where the other temples sink into insignificance by the side of the Jagannāth temple, the Lingarāj temple is rivalled by a number of other big temples, several of which are architecturally no less interesting. They may be grouped into (1) the Vindusāgar tank group, such as Vāsudeva, Uttareswar, Sisireswar, Kapālinī, and Sāri Deula; (2) the Pāpanāsinī tank group, such as Varuneswar, Maitreswar, Chitrakarni; (3) the Kedāra Gaurī pool group, including Parasurāmeswar, Siddheswar

Mukteswar, Kedāreswar and Gauri, Rājārānī, and Nākeswar; (4) the Gosahasreswar tank group with several temples like Gosahasreswar; (5) an outlying group, including Kapileswar on the south, Yameswar on the west, Rāmeswar on the north, and Brahmeswar, Megheswar and Bhāskareswar on the east. The temple last named is an unique structure consisting of a square tower, rising from a square platform, which is built over a huge stone linga, reaching from the ground to the spire.

Mukteswar.

Space does not allow of a description of all these temples, but Mukteswar calls for special mention. This beautiful little shrine is surrounded by a number of small shrines, and close to it stands the temple of Siddheswar, a larger structure. It is barely 35 feet high, with a porch 25 feet high, but the ornamentation is of the richest description. The floral bands are neat and well executed, the basreliefs are sharp and impressive, the statuettes vigorous, full of action, varied and decently draped, and the whole temple well proportioned. Unlike most Orissan temples, the ceiling of the porch is carved, and is an elaborate and beautiful piece of work. In front of the porch is a graceful archway or *torana*, 15 feet high, supported on two columns of elaborate workmanship. Dr. Rājendra Lāla Mittra describes the carvings as follows:—"Among the subjects may be noticed a lady mounted on a rampant elephant and striking her uplifted sword against a giant armed with a sword and a shield; a figure of Annapūrnā presenting some alms to his lord Siva; semiophide females canopied under the expanded hood of five or seven-headed cobras; lions mounted on elephants; groups of elephants fighting with lions; lions capped with elephantine trunks; damsels in various attitudes, some dancing, others playing on the *mridanga* or the *vīnā* or the *tambur;* crouching monsters supporting heavy weights; saints worshipping Siva; an emaciated hermit giving lessons to a disciple; another reading a palm leaf manuscript placed on a cross-legged stool; a lady standing under an umbrella; another standing by a door with a pet parrot on her hand; another enjoying the cool shade of a tree; another standing on a tortoise. This last is evidently intended for the goddess of the earth. The head-dresses of most of these ladies are particularly interesting. The scroll work, bosses and friezes are also worthy of special note, as they display marked excellence in design, and great delicacy of execution."

Date of the temples.

Of the minor temples Parasurāmeswar (group 2), Sisireswar, Kapālinī, and probably Uttareswar (group 1), form a distinct architectural group, earlier than the Lingarāj. Parasurāmeswar is evidently the oldest existing temple at Bhubaneswar or indeed in the whole of Orissa, and in many respects resembles the

Pāpanāth and Lokeswar (or Virūpāksha) temples in the Bombay Presidency, which were built in the 8th century A.D. Its early age is indicated by the following peculiarities:—Eight (not nine) planets over the cell doorway, inscribed labels over the planets, the archaic form of the letters in the labels and in an inscription over the south doorway of the porch, and the promiscuous mingling of Saiva and Vaishnava sculptures. The group itself is distinguished, among other features, by a simple plinth, by less elaborate carvings, by a sparing use of mouldings in the *bhitti* (body), by the use of a cornice and neck in the place of horizontal mouldings, by the absence of a coat of arms flanked by musicians with a lion projecting into the air from the central rib, by absence of side ribs and miniature temple forms, and by the flat roof with clerestory openings in the porches. The other temples mostly resemble the Lingarāj temple and are presumably not earlier than that great structure, the only exceptions being Mukteswar (group 3), and probably Sāri Deula (group 1). Several, however, do not resemble the Lingarāj in all their features, and may represent a parallel development, *e.g.*, Brahmeswar (group 5), Rājārānī, Siddheswar and Kedāreswar (group 3). Of the more important temples, the latest in date, to judge from their inscriptions, would seem to be Megheswar and probably Vāsudeva, belonging to the end of the twelfth century. Curiously enough, Vāsudeva on the Vindusāgar tank is the only temple of Vishnu in this city of Siva. The temples of Bhubaneswar may thus be regarded as having been built chiefly from the eighth to the twelfth century A.D.

Architecture.

Among them, and in fact among Orissan temples generally, the Lingarāj forms, on the whole, the best specimen of Orissan architecture. Its size, its massive proportions, the solidity of its construction, and its elaborate variety of details make it far superior to other Purī temples except those of Jagannāth and Konārak. It is also better preserved than these two latter temples (the one plastered over, and the other without its tower), and the grouping, execution and originality of its carvings and mouldings are in many cases better. It is a matter for regret that a close inspection of this fine example of Hindu architecture is debarred to Europeans, for none but Hindus are permitted to enter its sacred courts. Numerous specimens of Orissan carvings may, however, be seen in the other temples, especially Parasurāmeswar, Sisireswar and Kapālinī of the early group, and Brahmeswar, Megheswar, Rājārānī, Mukteswar, Sāri Deula and Yameswar of the later groups. They are all gems of architecture and carving, with admirable work in the foliage, in the carved lines shewing a free play of light and shade, and in the elephants, whose big limbs and heavy

gait have been naturally depicted in scores of different postures. The women, who have prominent pointed breasts and suggestive postures, also display considerable variety in their jewellery and head-dresses, while their *sārīs* are often drawn delicately with beautiful embroideries. But the human face is less successful, being flabby and expressionless, while the body is of inartistic proportions.

It is obvious that enormous labour was expended on these temples, and that minute care was taken even with small details. Their general character may be gathered from the remarks of Mr. Fergusson, who, after comparing the Lingarāj temple with the great pagoda at Tanjore, says:—"Besides, however, greater beauty in form, the northern example excels the other immeasurably in the fact that it is wholly in stone from the base to the apex, and—what, unfortunately, no woodcut can show—every inch of the surface is covered with carving in the most elaborate manner. It is not only the divisions of the courses, the roll-mouldings on the angles or the breaks on the face of the tower; these are sufficient to relieve its flatness, and with any other people they would be deemed sufficient; but every individual stone in the tower has a pattern carved upon it, not so as to break its outline, but sufficient to relieve any idea of monotony. It is perhaps not an exaggeration to say that if it would take, say lakh of rupees, to erect such a building as this, it would take three lakhs to carve it as this one is carved. Whether such an outlay is judicious or not, is another question. Most people would be of opinion that a building four times as large would produce a greater and more imposing architectural effect; but this is not the way a Hindu ever looked at the matter. Infinite labour bestowed on every detail was the mode in which he thought he could render his temple most worthy of the deity; and whether he was right or wrong, the effect of the whole is certainly marvellously beautiful."*

Other remains.

Next to the temples, the objects most deserving of notice in Bhubaneswar are its tanks. The most remarkable of them are the Vindusāgar, the Devīpādaharā (miscalled Sahasralingam) and the Pāpanāsinī, lying to the north-east, east and west of the Lingarāj temple, the Kedāra Gaurī near Kedāreswar, the Brahmakunda near Brahmeswar, the Gosāgar near Gosahasreswar, and the Kapilahrada outside the Kapileswar temple. The biggest is the Vindusāgar, measuring 1,300 feet by 700 feet, and having a depth of water averaging 6 to 10 feet. It was embanked with stone on all sides, forming magnificent flights of steps, but the greater part of that to the north and half of those to the east and

*History of India and Eastern Architecture, Book V, Ch. II., pp. 421-3.

west have fallen down. In the north-eastern corner is a channel, under a stone covering, which was apparently designed for letting in outside water. In the centre is an island, 110 feet by 100 feet, protected by a stone revetment, with a small temple in its north-east corner. At present the tank water is dull green in colour and full of slimy masses of algæ. All pilgrims and most residents bathe in it, as it is said to contain drops from all the sacred rivers and tanks in India, so that special sanctity attaches to it. The tank must be fed by natural springs at the bottom; and at one time, water came probably through the north-east channel from the Ganguā stream. This stream, though now but a shadow of its former self, drains Bhubaneswar, and can be traced close to the police outpost near the Vindusāgar tank. One mile lower down, it was crossed by an old bridge of eighteen openings, said to have been built by Varāha Kesarī, the king credited with having excavated the Vindusāgar tank. The stones of this old bridge were removed by contractors for metalling roads some 15 years ago. To the south of the Lingarāj temple is a high mound, said to be the ruins of Lalāta Kesarī's palace; and about a mile and a half to the south-east is Sisupāla, an old fort, the remains of whose moats and ramparts can still be seen.

Since 1899 Government has been carrying out repairs to several of the temples, and the following have been more or less repaired, viz., Brahmeswar, Rājārānī, Mukteswar, Bhāskareswar, Siddheswar, Parasurāmeswar, Lingarāj, Sāri Deula, Megheswar, Varuneswar, Chitrakarni and the Sahasralingam tank. In these repairs no attempts were made to alter or improve, but simply to restore; whenever a temple had to be completely or partially dismantled and rebuilt, each stone, as it was taken down, was numbered, thus obviating any chance of its not being put back on its proper place, and ensuring that the temple has the same appearance as when first built.*

Biswanāth Hill.—The highest peak in a line of low hills intersected by the Purī branch railway at Jagdalpur to the north of the Delāng railway station. The hill, which is 500 feet above sea-level, rises behind the Jagadalpur inspection bungalow and is crowned by the temple of Biswanāth. An annual gathering of the neighhouring Hindu villagers takes place on the summit of the hill during Raja Sankránti in the month of June.

Chitrakot Hill.—A hill, with a height of 100 feet above the sea-level, in village Kāsipur to the south-east of the Jankiā inspection bungalow. It is a bare and precipitous hill, overgrown

* Report on the repairs executed to the Bhubaneswar temples and Udayagiri caves, by Mr. M. H. Arnott (1903) p.3.

with shrubs and infested with bears, and contains a cave on its summit which is the abode of a hermit. It commands a magnificent view of the Chilkā lake.

Dhauli.—A village situated 4 miles south-west of Bhubaneswar on the south bank of the Dayā river. Close to the village are two short ranges of low hills running parallel to each other and only a few hundred feet apart. On the north face of the southern range, the rock, which is called Aswatthāmā, has been hewn and polished for a space of 15 feet long by 10 feet in height; and here some rock-edicts of Piyadasi or Asoka are inscribed. The inscription is deeply cut into the rock, and is divided into four tablets. The first appears to have been executed at a different period from the rest, the letters being much larger and not so well cut; while the fourth is encircled by a deep line and is cut with more care than any of the others. Several letters having been lost during the last 70 years, a shade in stone has recently been put up over the inscription in order to preserve it from further damage.

Immediately above the inscription, is a terrace measuring 16 feet by 14 feet, on the right side of which is the forepart of an elephant, 4 feet high, hewn out of the solid rock and carved with some skill. If of the same age as the inscription—and there are no reasons to think that it is not—this is one of the oldest carvings in India. A small narrow groove runs round three sides of the terrace, leaving a space of three feet immediately in front of the elephant, and two other grooves may be noticed on either side of the elephant on the floor and along the perpendicular face of the rock. These grooves were probably intended to support a wooden canopy. Originally designed as an emblem of Gautama Buddha, the elephant has become an object of popular worship during the last half century. At the time of Mr. Kittoe's visit (1838), it did not receive regular worship, but one day in the year the Brāhmans of the temples in the vicinity came to throw water on it and to besmear it with red lead in honour of Ganesha. It is now held in great veneration, and among the neighbouring villagers the most solemn form of taking an oath is to swear by Dhauleswarī Mātā, *i.e.*, the tutelary goddess of the spot. On a flat terrace on the same hill near the figure of the elephant, and also on the opposite ridge, are brick remains evidently marking the site of two stūpas. There are also a few broken natural caverns or fissures in the rocks adjoining the Aswatthāmā.

The northern ridge culminates in a temple-crowned peak, and at its western extremity are a number of caves natural and

artificial. To the east of this temple, and at a lower level, is a natural fissure full of bats; and on a boulder at the top, near the entrance, is cut a small inscription in three lines. Lower down on the south slope of the hill is an artificially cut cave, close to which are several other caves begun but left unfinished, and a large fissure or hollow in the rock. Lower down, between the western extremities of the two ridges, is a small plainly built temple of laterite dedicated to Siva. The temple on the top of the northern ridge stands on a platform, measuring 150 by 100 feet, with revetments of cut laterite blocks set without cement. It has no porch, and the mouldings are plain, but bold and massive. The sanctum is a square chamber, with a false roof inside. The façade has two openings, one over the other, the lower giving admission into the sanctum, the upper into the chamber formed by the inner roof and the hollow roof of the tower. A cornice runs round the interior of the cell at a height of 6 feet above the floor. The whole of the north side of the temple has fallen down, but the other sides stand intact though evidently rather shaky. This temple has several peculiar features, which should give it more attention than it has hitherto received.

East of the hills is a large tank named Kausalyā Gāng, in the middle of which is an island containing the remains of a palace. The tank is said to have been originally a *kos* (2 miles) long on each side; and though a great part of it is now silted up and under cultivation, it is still about a mile and a half long and 5 furlongs broad. It is choked with weeds, and with sand probably brought from the Dayā river, with which it was apparently connected by a canal at the north-west corner. Remains of a bridge built over the canal are traceable; and on the west are heaps of stone foundations, potsherds and bricks indicating the former existence of a town. The tank was dug, according to the palm-leaf chronicles, by Gangeswardeva, in expiation of his sin in having an incestuous connection with his beautiful daughter Kausalyā.

The most interesting remains, however, are the edicts of Asoka which call for a more detailed description. Discovered by Lieut. Kittoe in 1837, who took a careful copy of them, they were first deciphered by James Prinsep, who published a translation in the Journal of the Asiatic Society of Bengal in 1838. The alphabet and language of these and other rock inscriptions had long been the wonder of the learned, and it was the genius of Prinsep which discovered the true key of the character and brought to light its secrets. Several other translations have since been published, but the standard reading is that given by Dr. Buhler in the

Reports of the Archæological Survey of Southern India, Vol. I, 1887, prepared from impressions taken by Dr. Burgess in 1882; on the same materials, the special edicts portion was revised by M. Senart and translated by Dr. Grierson in the Indian Antiquary, Vol. XIX.

The inscription is in three columns. The left hand column in 26 lines is special edict I, the Provincials' edict of Mr. Vincent Smith; the middle column in 33 lines contains general edicts I—VI; the right hand column has two parts, the upper in 19 lines containing general edicts VII—X and XIV, and the lower, in 11 lines within a frame, special edict II, the Borderers' edict of Mr. Smith. The fourteen general edicts have been found in five other places in India and a fragment of edict VIII at Sopārā near Bombay. The only other place at which the special edicts have been inscribed is Jaugada in the adjoining district of Ganjām.

The question naturally arises why edicts XI, XII and XIII have been excluded from the Dhauli and Jaugada versions. An explanation is probably to be found in the statement in edict XIV, that "this set of *dhamma* edicts has been written by command of the king Piyadasi, beloved of the gods, in a form sometimes condensed, sometimes of medium length, sometimes expanded, for everything is not suitable in every place, and my dominions are extensive." Now edict XIII refers to the conquest of Kalinga, the terrible massacre in that war, the king's remorse, his desire for true conquest—the conquest by means of *dhamma* and not by force of arms—and his arrangements for ensuring that end. Such an edict may not have been considered suitable for the conquered territory of Kalinga. As regards the other two edicts, edict XI defines *dhamma*, and edict XII declares the king's reverence for all sects, defines toleration, and speaks of the appointment of censors. Now the appointment of these censors had already been notified in edict V, and the king's toleration in edict VII, while *dhamma* had been defined in edict III. It is possible therefore that the edicts were omitted partly for condensation and partly because they were not applicable to the conquered tract.

Another point worth noticing is the existence of the two special edicts, which are not addressed to the public, but to the officers in charge of the country. These two special edicts were apparently considered "suitable" for the conquered territory. Kalinga had numerous aboriginal tribes on the border requiring special treatment; it had been only recently subdued; and the king's officers had to be specially charged to stop torture,

unwarranted imprisonment or acts of violence, and at the same time not to be indolent in the discharge of their duties. They have one noticeable peculiarity, viz., the name "King Piyadasi" is omitted. The omission is probably due to reverential motives, and must have been intentional; it may also be noticed in other edicts addressed to officers.

For a translation of the Dhauli edicts the reader is referred to Buhler's translation in the Archæological Survey of Southern India, Vol. I, and to Mr. Grierson's translation of M. Senart's papers in the Indian Antiquary. They may be summarized as follows:—Edict I forbids the slaughter of animals in the capital and in His Majesty's own kitchen. Edict II declares that healing herbs for men and beasts, and trees and wells for their comfort have been provided. Edict III directs the lieges and officers of the king to repair to the general assembly every five years for proclaiming *dhamma.* Edict IV points out that the king has practised *dhamma* and has been encouraging it among his people. Edict V declares that censors have been appointed for the furtherance of *dhamma.* Edict VI says that the king has made certain arrangements for the prompt despatch of public business. Edict VII recognizes the infirm nature of man and recommends certain virtues. Edict VIII points out that the king, instead of going out on pleasure tours, went out on tours of piety. Edict IX condemns many ceremonies as corrupt and worthless, and commends *dhamma* as the true ceremonial. Edict X deprecates the ordinary ideas of glory and renown, and suggests that all should try to be freed from sin for the sake of the hereafter. Edict XIV forms the epilogue treating of the form and nature of the *dhamma* edicts. Special edict I directs the king's officers to see that moral rule is observed, that unwarranted imprisonment, torture or acts of violence are stopped, and that the officers themselves do not become indolent in their duty. Special edict II directs the officers to convince the border tribes that the king bears them good will and wishes them to practise *dhamma,* and expects to be well served by the officers themselves. *Dhamma,* it may be added, consists in obedience to parents, liberality to friends, acquaintances, relatives, Brāhmans and ascetics, respect for the sanctity of life, and avoidance of extra-avgance and violence of language (edict III).

These edicts display a broad catholic view and inculcate a lofty ethical doctrine unique for the age in which they were incised. Such liberal ethics were, in essence, pre-Buddhistic, also appearing in the Upanishads and Dharma Sūtras. Vedic Brāhmanism, while it prescribed and enforced social and

ceremonial purity, left religious speculation free; and the Vedas and Upanishads reveal an astonishing freedom of thought regarding the great mysteries of life, such as the existence of God and the hereafter, the existence and the immortality of soul, the source and method of creation, the origin of sin, etc. But, though these doctrines and speculations had existed from a long time before, they were intended chiefly for the twice-born castes, especially the Brāhmans, and were not regularly enforced. The great merit of Asoka is that he lent them his powerful support and insisted on *dhamma* and religious toleration being practised by all throughout his extensive empire. Furthermore, for himself he emphatically declared :—" All men are my children; and, just as for my own children, I desire that they should enjoy all happiness and prosperity both in this world and in the next, so for all men I desire the like happiness and prosperity."

The time of the inscription can be only approximately ascertained. Edicts II and XIII mention the Hellenistic kings of Syria, Egypt, Cyrene, Macedonia and Epirus, viz., Antiochos Theos, Ptolemy Philadelphos, Magas, Antigonos Gonatas, and Alexander, who were all alive, at the same time, in 258 B.C. at the latest. The latest fact recorded in the edicts is the establishment of religious censors in the fourteenth year of the coronation (general edict V). The date of the king's coronation is not known; but Piyadasi, who has been identified with Asoka, would appear from the Purānas, and from Buddhist and Jaina chronicles, to have been anointed about 269 B.C. These general edicts could not have been inscribed earlier than 256 B.C., and probably were inscribed a year or so after that. Of the special edicts, edict II, the Borderers' edict, is said by Mr. Vincent Smith to be contemporaneous with the general edicts, and edict I, the Provincials' edict, is put two years later.* There are some grounds, however, for the view that they may have been composed at the same time, and inscribed later than the general edicts.

The edicts were meant for the general public and for the king's officers, and therefore must have been inscribed close to a big town on or near the public highway. This town was presumably Tosāli, for the officers in charge of which the special edicts are addressed; and Tosāli may with some probability be identified with the Dosara of Ptolemy's map, the Desarene of the Periplus and the Dasārna of the Mahābhārata, *l* in Māgadhī being substituted for *r*. No trace of this town has yet been found, but the physical features of the country appears to have changed considerably.

* Smith, *Asoka*, p. 64.

The Dayā river now flows to the north of the Dhauli hills cutting them off from the main rocks of Dāndimāl *pargana*. From the depressions which can still be traced to the south and south-east, it seems probable that the Dayā formerly flowed on the south side of the hills, and that the big tank Kausalyā Gāng to the east occupies some of these depressions. The stream Ganguā apparently flowed further to the east, and joined the Dayā or Koyākhāi opposite Bālkāti, still a large centre of trade. The city of Tosāli may thus have been situated between the Dhauli hills and the junction of the Koyākhāi, Ganguā and Dayā, on the highway from Khandagiri and Bhubaneswar. Tosāli must at least have been a large town and the capital of the surrounding country, for a *kumāra* or prince was in charge of it.

Jatnī.—A village containing the railway junction known as Khurdā Road Station. Formerly an insignificant village, it has risen to importance since it was tapped by the Bengal-Nāgpur Railway and made the site of the junction for the Purī branch railway. It contains the residences of the railway staff stationed at the junction.

Kaipadar.—A village situated on the Ganjām-Cuttack road, 7 miles to the south-west of Khurdā. It contains the tomb of a Muhammadan saint called Bakhārī Sāheb, which is visited by both Hindus and Muhammadans in order to obtain fulfilment of their vows or wishes. Offering of sweetmeats are specially made in order to obtain children, to get rid of some incurable disease, or to ensure success in business.

Kākatpur.—A village on the Prāchī river, containing the temple of Mangalā Thākurānī, which is visited by pilgrims from different parts of this district and of Cuttack and Balasore on Chaitra Sankrānti day in March. One special feature of this festival is that the priests of the Thākurānī, with a pitcher full of water and offerings of flowers, walk over a narrow trench containing lighted embers. After the ceremony, the priests journey from village to village, promising immunity from attacks of small-pox and cholera.

Kālaparā Ghāt.—A village on the Chilkā lake, which was an important centre of trade before the opening of the Bengal-Nāgpur Railway, boats from the Madras Presidency discharging their cargoes here and returning home with rice and other exports from Orissa. Trade has considerably declined since the opening of the railway.

Khandagiri.—A hill in the north-west of the Khurdā subdivision, situated in 20° 16′ N. and 85° 47′ E., three miles north-west of Bhubaneswar. It is approached from that place by a road that,

after crossing the railway line, runs through an undulating stretch of arid laterite, until it reachee its lowest level at the Kochilākhunti stream, three quarters of a mile from the hill. Here the road begins to rise, passing by Jagmārā, a village surrounded by mango-topes and bamboo clumps, intermixed with wild bushes and trees and leading through reserved forests. At the third mile the hill rises abruptly in the midst of a well-wooded belt, and stretches in a long curve from north-east to south-west. From the foot it is seen to be divided into three distinct peaks, called Udayagiri or the sunrise hill, Khandagiri or the broken hill and Nīlgiri or the blue hill; but in the maps all the three peaks appear under one name, Khandagiri. In the Sanskrit *Māhātmyas* (guide-books) they are called Khandāchala. The crest of Khandagiri is the highest point, being 123 feet high, while the crest of Udayagiri is 110 feet high. The hill is composed of Athgarh sandstone, greyish and porous, easy to excavate, but too gritty for fine carvings. Udayagiri has a small Vaishnava *math* at its foot, while at the base of Khandagiri is a Government inspection bungalow.

These hills are honey-combed with caves, of which 44 are in Udayagiri, 19 in Khandagiri and 3 in Nīlgiri. Their number, age and carvings make these caves the most interesting in Eastern India. In Udayagiri a foot-path running from the north-east end to the gap, divides the caves into two groups, one higher, the other lower. The higher group is roughly divisible into three sub-groups, the easternmost, the central, and below the central, the south-western. The lower group begins opposite the Hātīgumphā or elephant cave, and running down in a semi-circle, ends in the Rānīhansapura cave. In Khandagiri all the caves except two lie along the foot track, Tātwā No. II being a few feet below Tātwā No. I, and the Ananta on a higher ledge, above which is the crest crowned by a Jaina temple. A general idea of the position of the caves may be gathered from the plan annexed.

UDAYAGIRI CAVES. Queen's Palace.

The Rānīhansapura or Rānīnabara cave, *i.e.*, the Queen's Palace (also called Rānīgumphā) is the biggest and the most richly carved. It comprises two ranges of rooms on three sides of a quadrangle, leaving the south-east side open. In the lower range are (1) a main wing with three rooms facing south-east, and one room facing south-west, (2) a left wing with three rooms on each side, except the south-west, and (3) a right wing with one room facing south-west. The upper range of rooms is placed not immediately over the lower rooms, but over the rocky mass behind, and contains (1) a main wing with four rooms, (2) a left wing with one room facing a covered verandah, and (3) a right

wing with one room. The rooms have long verandahs in front presenting three special features.

The first is that at each end there is the figure of a guard carved in high relief. The guard in the lower range is a soldier standing erect with legs bare, clothes worn like a wrestler, a spear in the right hand, and a coil of rope in the other. In the upper main wing the verandah is guarded by figures riding animals, probably the goddess Ambā sitting astride on a lion, and Indra riding a bull or elephant. In the upper right wing are a turbaned, pot-bellied, armless soldier 4 feet 7 inches high, with his *dhoti* tucked up, and a kilted warrior, 4 feet 4 inches high, booted and turbaned, with a straight sword in a scabbard hanging from his left side. The boot and kilt remind one of the booted image of the sun, "clad in the dress of the northerners."* The second peculiar feature of the verandah is that it has low stone benches, as in the old caves of Western India. The third is that the verandah roof was supported on pillars, all of a very archaic type. But all the ten pillars of the lower range, and seven out of nine in the upper main wing, are gone; and the three surviving pillars and all the pilasters are more or less damaged by the climate.

Access to the rooms is obtained through oblong doorways, of which there are one to three according to the size of the room, each having a groove cut on either side, probably for putting in a *jhāmp* or bamboo-framed door. In the upper right wing the sides of the doorways are plain, but elsewhere they have side pilasters, from which springs a carved arch framing the tympanum. The capitals of the pilasters are carved with two winged animals side by side, and the small sentry rooms at the entrance of the lower main wing have carvings of jars over the base tiles, jars being deemed highly auspicious objects to place at an entrance. The arch above the tympanum is carved with an animal at each base, and filled in with flowers and fruits, and in one instance with figures of men and animals, &c., capped by triangular *trisūlas*. The arches are joined by railings, four-barred or five-barred, above which in the upper and lower main wings and in the lower right wing run friezes of scenes in low relief. The rooms are 3 feet 9 inches to 7 feet high, and vary in length from 20 feet to 11 feet; only one has a window. They are plain inside with flat ceilings, and the floor is curved at the inner end in the shape of pillows, evidently for the monk's beds.

Friezes. The three friezes and the carvings on the lower sentry rooms naturally attract special attention. The carving on the small

* Varāha-mihira, *Brihat-Samhitā*, Ch. LVIII, verse 46.

sentry rooms epresents hill scenery. Elephants stand among lotuses by tall trees laden with fruit and flowers; there are peaks represented by triangular buds; and at the top are monkeys, a cave with animals, and two females. The smallest frieze, which is about 19½ feet long, is in the lower right wing and has four compartments. The first compartment shows to the left a dwarf standing under a tree, evidently marking the beginning of the sculptured story; then comes a lady rather scantily clad, with folded hands, wearing heavy earrings, necklaces and leg-ornaments, and by her side is a male, wearing his *dhoti* as a wrestler would, with heavy earrings and also with folded hands; lastly another female (shown up to the waist) is seen carrying offerings in her right hand and a plate in her left. The second compartment shows apparently the same three figures, with two more females, one of whom is carrying a plate. The principal figures are shown dancing in religious ecstacy. The third compartment shows a pavilion on two posts, under which is a lady dancing, with hands outstretched, to music played by four females on the *dhol*, *mridanga*, harp and flute. The fourth shows the lady, her husband, and a second female, both the females carrying offerings. The scene ends with a boy under a tree. These scenes are probably intended to represent a family attending a temple during some religious festival.

The largest frieze is in the lower main wing, and has 11 compartments. Unfortunately, the verandah roof having fallen, it has suffered much from exposure to sun, rain and the full force of the south-easterly wind. The first compartment shows a tree and a double-storied house, with three doors (resembling the cave doorways), two in the lower storey, and the third, with a verandah, in the upper. From the lower doors three females, and from the upper one a male, are looking out. The second compartment is almost entirely effaced, but in the third seven figures may still be discerned, one holding an umbrella, and another riding a horse. The fourth scene is also mutilated, but ten figures are visible, one carrying a sword and three riding an elephant. In the fifth scene seven figures can with difficulty be made out, one holding an umbrella over the principal man. In the sixth scene one figure is just decipherable, holding an umbrella over another in the centre. In the seventh scene, six figures are traceable, of whom one holds a straight sword, and another with folded hands looks towards the third, apparently the principal man. The eighth compartment contains nine figures, a man followed by two attendants, and apparently worshipped by a male with folded hands, by two females standing with offerings, and

two other females on their knees, with a boy turning to one of the kneeling women, probably his mother, who is apparently taking up the dust to show reverence to the principal man. After this, come two scenes on the side doorway, the left hand one showing a caparisoned horse and three males, of whom one is under an umbrella held by an attendant and is followed by two guards with straight swords. The last scene on the pilasters shows six females, three standing with pitchers on their heads and the last one standing with folded hands, besides two kneeling females, one holding a bowl and the other something broken.

The scenes, though mostly mutilated, clearly indicate the procession of a saint through a town during some religious festival, when persons would be looking out from their houses for a glimpse of him, when horses would be led, elephants ridden and guards be in attendance, while the people, both male and female, would follow the saint with folded hands, and women standing or kneeling would present him with fruits or cakes on plates and ask his blessing. In this hill Pārsvanāth appears to be the most honoured of the Tīrthankaras, and it may therefore be conjectured that the scenes are somehow connected with him or some revered disciple of his.

The frieze on the upper main wing, which is nearly 60 feet long, is the most interesting:—in fact, no frieze in Indian caves has excited more discussion among archæologists. The bas-reliefs run in nine compartments over the eight front doorways. The first and ninth each contain a *vidyādhara* with cloth plaits falling to the ground and a *chadar* or scarf floating above, and with both hands raised, one holding a plate of offerings, and the other tesselated cords, or a roll of garlands. They evidently mark the beginning and the end of the story. The second may be called the elephant-scene. From under some rocks represented by triangles, come two elephants, the front one on its hind legs; they are faced by several standing figures, viz., a woman holding a coiled rope in her right hand, a man with a raised bludgeon (with an animal, probably a dog, in front of them), another woman holding the left hand of the first, and a third woman behind raising two ropes, one in each hand, apparently to throw them at the elephants, while in front of the second standing woman is another doing something behind the animal. Beyond them are three figures, in the middle a lady held up on the right by a female, and with a male on her left; while in front of them, one female is dragging along another, partly fallen to the ground. The scene closes with a tree (probably an *asoka* tree) having lanceolate leaves and bunches of flowers.

The third scene, which may be called the abduction scene, begins with a doorway like the cave doorways, through which appears a man reclining as if in pain or sorrow against a lady, whose right hand is on the man's right shoulder, while her left holds the man's right hand; the lady wears earrings, a necklace, leglets, and probably a girdle. Beyond her is another female holding the right hand of a man wearing a *dhoti* like a wrestler and armed with a straight sword; her right hand is raised apparently to restrain him; and behind is a tree. Next is shown a combat between the last male and the first lady, both armed with a straight sword and oblong shield, with a small bird running near her left leg. The scene ends with the lady being carried off bodily by the male, her left hand still holding the shield and her right hand outstretched with the index finger pointing to some object.

The fourth scene, which may be called the hunting scene, shows a horse reined and bridled, with four attendants, two with straight swords and one with a fly-fan, while a boy stands in front of the horse. Beyond him is a prince, clad like a wrestler, with a bow in his left and an arrow in his right hand; he wears a necklet, a long necklace and heavy earrings, while a straight scabbard is hanging on his left side. He is evidently aiming the arrow at a long-horned winged deer, with two fawns below, in a forest marked by a large flowered tree. The scene closes with the prince, with the bow still in his left hand, talking with a lady seated on the fork of an *asoka* tree, under which rests a winged deer, evidently the one shot at. The fifth scene, which is partly effaced, represents a feast. Here a lady is seated; to her left is a figure, now almost obliterated, while to her right, five females bring in food on plates, etc., and three more are seated in front doing obeisance to her. In the last portion a male seated with food below the seat can be made out. The sixth scene is entirely obliterated. The seventh, much mutilated, seems to represent an amorous scene between a male and a female. The eighth scene, now largely broken up, shows an elephant and apparently another animal, with two figures on each side.

Various explanations have been given of these scenes, which also appear briefly in the Ganesha cave. The first question is whether they form a connected story, or merely pourtray different social and domestic events. From analogy with the other two friezes in the Queen's Palace and from the worshipping *vidyādharas* marking a beginning and an end, it is not unlikely that they were carved with the intention of representing connected legends. If so, what personage was more likely to be selected than a Tīrthankara

or Jaina saint, and of the latter than Pārsvanāth, who in these caves appears to be the most favoured personality? Unfortunately very little is known of the legendary life of Pārsvanāth. According to the *Pārsvanāth-charita* of Bhavadeva Suri, a mediæval work of the 13th century, Pārsvanāth was the son of the king of Benāres. During his youth the town of Kusasthala (Kanauj) was besieged by the Yavana king of Kalinga for the forcible abduction of its beautiful princess, Prabhābatī. It was relieved by Pārsva, who drove away the Yavana, and as a reward was given the princess in marriage. Subsequently Pārsva, during a halt under an *asoka* tree, while out hunting, was led to see the beauties of a religious life and became an ascetic. In the course of his preaching, he visited Paundra, Tāmralipta, and Nāgapurī, where many became his disciples, and finally he attained *nirvāna* on Mount Sametasikhara, which has been identified with the modern Parasnāth hill. The *Kalpasūtra* of about the fifth century A.D. omits the rescue of Kusasthala and the names of places visited by Pārsva, but otherwise, so far as it goes, agrees with this mediæval account.* In the list of *sthaviras*, moreover, one comes across certain early *sākhas* of the Jainas, Tāmraliptikā and Pundravardhaniyā.†

The mediæval Jaina legends thus connect Pārsva with Eastern India (including Kalinga); and it is not unreasonable therefore to suggest that the elephant scene introduces Pārsva's future wife with her relatives and attendants, that in the next scene she is abducted by the Kalinga king, that in the fourth scene she is rescued by Pārsvanāth in a forest while hunting, that the following scene depicts the wedding feast, the seventh scene the consummation of marriage, and the eighth scene a march with elephants. Similarly, the frieze in the lower wing may represent Pārsvanāth as a Tīrthankara his wanderings, and the honours shown him. It is quite natural that Jaina monks should have carved in their cells episodes in the life of their venerable saint.

Other caves. From the road near the *math* a flight of steps lead to the Jayabijaya cave, between which and the Queens' Palace lie (1) two small cells with verandahs, called Bājādāra or the musicians' cave; (2) a cave with an elephant frieze (Chhota-hātī); (3) the Alakāpurī cave, or Kubera's palace; and (4) a small cave to the right of the latter. The Chhota-hātī cave consists of one room with a doorway and a frieze, on which are carved two elephants, the trunked head of a third, and a tree. Alakāpurī, called Swargapurī by Mittra and Fergusson, is a two-storied cave with two rooms below and

* Translation by H. Jacobi, Sacred Books of the East, Vol. XXII, pp 273—5.
† Do., p. 288.

a large room above, all with finely arched ceilings and verandahs having benches and shelves. The pilasters are carved at the top with winged lions, animals with human faces (*naba-gunjara*), etc.; and one pillar bracket shows an elephant king, over which another elephant holds an umbrella while a third is fanning him.

Jaya-bijaya. The Jayabijaya has two rooms with a verandah and terrace. The verandah has a male guard on the left and a female on the right. Over the two doorways is a frieze in three compartments. The first and third each contain a fat heavy-faced *yaksha* carrying a plate of offerings in one hand and tessellated cords or something broken in the other. The second compartment shows, in the centre within a square railing, a holy tree (*pīpal*) being worshipped by two males and two females; each of the latter holds a plate of offerings, the left male has folded hands, and the right male is tying a garland or strips of cloths to a branch. Over this cave is another open cave.

Panasa and Pātālapurī. In the semicircle between Jayabijaya and Manchapurī are found (1) two open caves called Thākurānī, (2) the Panasa cave and (3) Pātālapurī. The Panasa or jack-fruit cave, mentioned by Mittra as Gopālapura, is a room with a verandah having bas-reliefs of animals at the top of its pilasters and a small cave over it. It is so called after a jack-fruit tree growing close by. In Pātālapurī or the hell-house cave, called Manchapura by Mittra, a benched verandah leads to two side rooms and two back rooms, now made into one by the fall of the partition wall. The next two caves end the semicircle of the lower range. They are important, as they have inscriptions connecting them with the elephant cave on the other side of the foot track. One is called Manchapurī, and the other Swargapurī or Vaikunthapurī.

Manchapurī. The Manchapurī, *i.e.*, the house of earth, has a courtyard with first a room with a verandah on the right, and then a verandah leading to a side room and two back rooms. The verandahs of the main wing and of the right wing have each figures of two guards, one at either end and all buried up to the knee. The main wing verandah has its roof front carved; the carvings, now nearly obliterated, indicate faintly a five-barred railing with a procession of an elephant and other figures below it. The main wing rooms have five doorways (including the one in the side room), with side pilasters and arches carved, as usual, with animals, fruits and flowers. The arches are joined by railings, over which are bas-reliefs in five compartments. The fourth has an inscription of one line over the railing, and in the seventh compartment is another inscription. The first inscription refers to the room as the cave of the warrior Vakadepa king of

Kalinga, entitled Mahameghavāhana, *i.e*, literally, having conveyances or elephants like big clouds. The second simply describes the room as the cave of prince Vadukha. The titles of Vakadepa are repetitions of those given to king Khāravela in the inscription on the elephant cave, while the fact that Vadukha is called simply a prince suggests that he was a relation, probably the son of Vakadepa. This cave is called Pātālapurī by Mittra and Fergusson.

Swargapurī.

On the rock behind Manchapurī rises Swargapurī, *i.e.*, the house of heaven, a cave referred to by Mittra and Fergusson as Vaikunthapurī. It consists of a verandah, a long back room and a side room on the right. The verandah has a low bench, but has lost the greater part of its roof, with pillars and guards, if any. The back room, which is 22½ feet long, 6½ feet broad and 4¼ feet high, has three doorways, and an inscription in three lines, which speaks of the cave having been made for Kalinga monks, as a gift to the *Arhats*, by the great-grandchild of king Lālaka Hathisāhasa, the chief queen of Khāravela, king of Kalinga.

Ganesha cave.

The higher ledge begins at the extreme east end with a pool called Lalitā-kunda and three open caves. Then follows the Ganesha cave, so called apparently from a carving of that god on the inner wall. It consists of two rooms with a verandah leading to them; but the verandah appears to have been filled up with earth and stones, and it is now reached from the courtyard by a flight of four steps flanked on each side by an elephant holding lotus plants over a full-blown lotus. The verandah roof was supported by two pilasters and four pillars, but the pillar and pilaster on the right hand are gone. On the left pilaster is the figure of a guard, 4½ feet high, having bare legs, a turbaned head, and a spear in the right hand; over this guard is the carving of a bull. The two rooms are separated by a wall, in which a small aperture was made to serve as a window. Each room has two doorways with the usual side pilasters, tympanum and arch. The arches are joined by four-barred railings, over which are two sculptured scenes, resembling some of the scenes in the upper main wing of the Queen's Palace.

The first scene also begins with a tree and shows the first male lying on a bed, and the lady sitting by him with her right hand on his left leg, possibly shampooing it. The second scene is noticeably different. In the first part, the end of which is marked by a tree, perhaps to represent a forest, four kilted soldiers, armed with swords and shields, are fighting with men riding on an elephant. The hindmost rider has just cut off the head of the

nearest soldier, and the middle rider is shooting with a bow drawn to the ear; while the foremost rider, a lady armed with a rod or elephant goad, is looking on at the fight. The next act shows the elephant kneeling and the three riders dismounted, with another man in front of the elephant. Then the chief male (the man with the bow apparently) is showing the way to the lady. Lastly, the lady is sitting on a bed, and the male, leaning towards her, is talking to her, presumably in endearing terms. In the top corner a man is looking towards them, holding a plate in his right hand and a bag or some food in the other. If the Ganesha frieze tells the same story as the upper frieze of the Queen's Palace, as is not unlikely, it fills in one gap, viz., the way in which the abducted lady was rescued. The kilted soldiers are probably foreigners, and thus to some extent corroborate the mediæval legend that Pārsvanāth rescued the princess from the Yavana king of Kalinga.

Dhānaghara and Hātigumphā. The central group begins on the east with the Dhānaghara cave, and ends with the Bāghagumphā and Jambeswara cave, thus going round the crest of the hill. The top of the hill has been levelled, and the edge of the level portion set with laterite blocks. In the centre is a stone pavement, the remains probably of a small temple. Below the crest on the east side is an open cave, and further down the Dhānaghara (house of rice) cave. The latter is a room 14½ feet long, with three doorways facing east. The verandah is benched and partly filled up with earth, but is still 5½ feet high. On the left pilaster supporting its roof is a guard buried up to the knees, with an elephant at the top.

Turning round, one comes, beyond a small cell with an open cave above it, to Hātīgumphā or the elephant cave, a large open cave of irregular size, which may originally have consisted of four rooms, and probably had a verandah in front. Inside, the cave is, at its widest and longest, 57 feet by nearly 28 feet, while the cave mouth is 11¾ feet high. Some words are cut on the walls, apparently the names of monks or visitors. The roof rock has been scraped away in front for the incision of an inscription, in 17 lines, measuring 14 feet by 6 feet. This is the celebrated inscription of king Khāravela. It is now protected by a shade on stone pillars, in order to prevent further damage, the inscription on the soft gritty stone having suffered from the climate and lost many of its letters. The inscription is flanked at the beginning by a *trisūla* and an hour glass; at the end is a monogram in a railing, and on the left of the fourth line a *swastika*, all auspicious symbols. According to the reading of Pandit Bhagwānlāl Indrajī, the inscription purports to give the

biography of Khāravela, king of Kalinga, up to the 13th year of his reign and is dated in the 16th year of the Mauryan era, *i.e.*, some year between 158 and 153 B.C. A brief summary of the historical facts disclosed by this inscription has been given in Chapter II.

Sarpagumphā and Bāghagumphā.

To the west of the elephant cave are eight caves at varying heights, five directly under the hill crest, two in a side boulder (to the west), and one just opposite the snake cave. The Sarpagumphā or snake cave is on the other side of the footpath, facing east. Its verandah top is carved so as to resemble the head of a serpent with three hoods, the symbol of Pārsvanāth. The cell is small, and is only 3 feet high. There are two inscriptions, with several letters gone, of which the meaning cannot definitely be stated, one on the doorway and the other on the left jamb. On the left side of the same boulder is another cell without a verandah, and a little further down is an open cave in another boulder, now blocked by jungle. To the north-west of the snake cave is the Bāghagumphā or tiger cave, so called from its front being shaped into the eyes and snout of a *sārdūla* or tiger, with the outer opening representing its distended mouth and the cell door its gullet. The cell is 3½ feet high, and over the doorway is an inscription in two lines, calling it the cave of Sabhuti of Ugara Akhada. Further to the left of the same boulder is another cell, and above it a third cell and two open caves, more or less broken, facing south.

Jambeswara, Haridasa, Jagannāth, and Rasui.

On the same level with the tiger cave and at the extreme end, is the cave called Jambeswara, which is 3 feet 8 inches high and has two plain doorways, over one of which is a Brāhmī inscription in one line saying that it is the cave of Nākiya of Mahāmada and of his wife. From the tiger cave a flight of uneven steps takes one down to a group of three caves, about 50 feet higher than the road on the glen. The eastern cave bears the name Haridāsa, and consists of a room, over 20 feet long, with three doorways and an inscription speaking of the cave as a gift of Kshudrakarma of Kothājaya. The Jagannāth cave, so called from a rude drawing of that god on the inner wall, has one long room with three simple doorways and a verandah. By its side is a smaller cave called the Rasui or cook-room cave, with one simple doorway, the roof projecting slightly so as to form a pillarless verandah.

KHANDAGIRI CAVES.

Tātwā and Tentuli.

In the Khandagiri hill the caves begin from the north with Tātwā I, so called from the *tātwā* bird carved at the top corner of the tympanum arch. The cell is 16 feet 4 inches to 18 feet long and 5 feet 9 inches high, and is entered by three doorways with side pilasters, carved tympanum and carved arches. On the wall

is written in red ink an inscription in one line, and below it another inscription in five lines. Six feet below this is another cave marked similarly with *tātwā* birds and therefore called Tātwā II. The verandah is guarded at each end by the mutilated figure of a soldier armed with a spear. The cell, which is 11 feet 8 inches long and 4 feet 4 inches high, is entered by two doorways, on the wall between which is an inscription speaking of this being the cave of an attendant named Kusuma. Adjoining the verandah on the east is a small open cell, 3 feet 4 inches square and 3 feet high.

To the west of Tātwā I, is an open cave facing north-east, and beyond it, to the south-west, is a cave called Tentuli or the tamarind cave from a tamarind tree near by. The cell is 4 feet 5 inches high and has two doorways with a verandah in front. The right-hand doorway is blocked with stones, so as to convert it into a window-like opening.

Khandagiri and shell caves.

To the south-east of this is a double-storied cave, called Khandagiri or the broken hill from a crack in its two storeys. This cave is the first to be reached by the flight of steps from the public road. The room on the lower storey is 6 feet 2 inches high, and the upper room 4 feet 8 inches high. Besides these, there is a small broken cave in the lower and a small room in the upper storey with a small window and a figure of the god Patitapābana on the back wall. To its south is the cave called Dhānagarh (the rice fort) or the shell cave on account of certain characters found in it. Originally a room with a verandah, it has been converted into an open cave by the fall of the partition wall, a fragment of which is left on the right side. On the left side wall of the verandah are seven letters in shell-shaped characters not yet deciphered, but supposed to date back to the 7th to 9th century A. D.

Nabamuni, Bārabhuji and Trisūla.

Further south are three caves called respectively the cave of the nine saints, the twelve-handed cave and the Trisūla cave, from the images carved in their walls.

The Nabamuni or cave of the nine saints consisted of two rooms with a common verandah, but the front walls and the partition wall have fallen down. On the architrave inside is an inscription of about the 10th century A. D., which speaks of a Jaina monk Subhachandra in the 18th year of the increasingly victorious reign of Srīmad Udyota-Kesarī-deva. On the broken partition wall are another inscription of the same Subhachandra and a small inscription referring to a female lay disciple. The right-hand room contains images in moderate relief of ten Tīrthankaras, about a foot high, with their *sāsana-devis* or consorts below

them. Pārsvanāth, who is easily recognized by his serpent hoods, is the most honoured, for he is carved twice.

Beyond this cave lies the Bārabhuji or twelve-handed cave, so called from the figure of a female with twelve hands carved on the left wall of the verandah. The latter leads to a long room with three doorways, which are now fallen, the roof being supported by two recent pillars. On the walls are carved in moderate relief seated Tīrthankaras or Jaina saints with their *sāsana-devīs* or consorts below them; on the back or west wall is a large standing Pārsvanāth canopied by a seven-hooded serpent and without any *devīs.* The saints and their wives are shown with their different symbols, and are nearly of equal size, 8 to 9½ inches each; but the figure of Pārsvanāth is 2 feet 7½ inches high, from which he would appear to have had special honour.

Adjoining this on the south is the Trisūla cave, so called from a rude carving on the verandah wall. The room had three doorways, which are now fallen, the architrave being now supported on two pillars. The room is 22 feet by 7 feet, is 8 feet high, and is unique in having the inside benched. Above the benches is carved a series of 24 Tīrthankaras, including a standing Pārsvanāth under the seven hoods of a snake, and ending with Mahāvīra. In this group, too, Pārsvanāth, instead of being placed before Mahāvīra as the 23rd saint is given the position of honour, nearly in the centre of the back wall. The base of the 15th saint is hidden by a masonry structure rising from the floor, on which are placed three well-carved steatite images of Adināth. The general execution of the images in this group is finer than in the adjoining cave.

Lalā-tendu. Turning to the left, 50 or 60 feet off, Jaina images are found higher up, which will be described in the account of the higher ledge. Further west, near the Government bungalow, is a two-storied cave called after king Lalātendu Kesarī. The upper portion consisted of two rooms and a common verandah, all of which have been destroyed, portions of the walls alone still clinging to the rock. This side of the hill is very much exposed to south-easterly winds, and the side of the rock has fallen down. The rooms on the first floor contain some carvings of Jaina saints, among whom Pārsvanāth is the most prominent. The ground floor was buried in earth, and recent excavation has disclosed another room, a side room with approaches, and a circular cave with a doorway. Beyond this is a broken cave, and beyond that a pool called Akāsa Gangā. The western face of the hill contains three caverns apparently without any doorway.

and adjoining them on the south side is a natural cavern, containing water, called Gupta Gangā.

Ananta

The higher ledge may be climbed by steps cut in the rock on the right side of the Khandagiri or by steeper steps near the Bārabhujī cave, or by a track from Tātwā I. The northern portion of this ledge has been levelled and forms the courtyard of the Ananta Cave. This is a long room 23 to 24 feet long and 6 feet high with an arched ceiling. The room had four doorways, but the wall between the first and the second doorways is gone, the third is partially closed with stone blocks, leaving only the fourth, in its original state. On its back wall are carved 7 sacred symbols, *swastikas*, pointed *trisūlas*, etc. Below the first *swastika* is a small standing image now much worn, which probably represents Pārsvanāth. The front wall is covered with a mass of carvings, and the tympanum, the tympanum arch, and the space between the arches, including the side walls, are all more or less carved.

Beginning from the left, the first tympanum has the remains of a carved scene, which probably represents a royal elephant attended by an elephant on each side. The second tympanum shows the sun-god under an umbrella riding a chariot drawn by horses, with a female on each side, probably his two wives Sanjā and Chhāyā; while before the chariot is a burly demon on his knees, armed with a sword and a carved shield. The third tympanum shows the goddess Srī standing on lotus stalks with her arms entwined round lotus stalks, while two elephants, one on each side, are pouring water on her head. The fourth tympanum shows a (*pīpal*) tree within a square railing worshipped by a male with attendants; a woman is holding up a garland to be placed on a branch of the sacred tree, and is followed by a female attendant carrying a jar and a plate of offerings. The tympanum arches are also carved and represent some quaint scenes, *e.g.*, a man seizing the hind legs of a lion; then a burly man faced by a man riding a buffalo or horse, whose tail is also held by a man; a man holding a buffalo by the horns, whose hind leg is held by a man standing on the upturned legs of a man, whose head again is in the distended jaws of a *makara*. Every arch is enfolded within two big serpent hoods, the symbol of Pārsvanāth, and the spaces between the arches and the side walls are filled with flying *vidyādharas*, each carrying offerings.

Over the Trisūla cave is a white-washed temple of uncertain date. Beyond this to the south, high up on the rock, appear several images, which have been exposed by the fall of the side rocks. From the traces of a partition wall, it would appear that

there was a cave here, probably accessible from the higher ledge, containing images of Jaina saints and deities.

Jaina temple. The crest of Khandagiri has been levelled so as to form a terrace with stone edges. In the middle of this terrace stands a Jaina temple with two side temples. The main temple consists of a sanctuary and porch, built like Orissan porches with pyramidal roofs and ribbed domes. Within the sanctuary is a masonry platfrom with a small raised wall behind, in which are imbedded five images of Jaina saints. Behind the temple on a slightly lower level is another terrace, on which lie scattered scores of votive stūpas, indicating the existence of an older temple.

Nilgiri. From the inspection bungalow a track leads to the Nilgiri peak, which lies to the south-west of Khandagiri and is separated from it by a gap covered with jungle. Passing by a small pool, called Rādhākunda, deep in the south-east corner, the track leads to a small but broken open cave. Going up the hill, the track leads to a roofless *mandapa*, and then turns round to the right to an open cave facing south, now converted into two rooms by a partition wall of dressed stones, evidently erected recently. Further on, is a spring named Syāma Kunda with a masonry cell-shaped structure over it, and beyond it on the south side of the hill an open cave facing west, to which a flight of steps cut in the rock gives access.

Architecture of the caves. Altogether 11 different kinds of caves may be distinguished, viz., (1) open caverns, slightly improved by art, (2) open caverns with sides chiselled and partition walls cut, (3) open cells, called *chhātās* or umbrellas, (4) a room with a doorway, (5) a room also with a doorway, but with the top projecting to form a verandah, (6) a room with a regular verandah, (7) a set of rooms with a common verandah, (8) a set of rooms with a side room and a common verandah, (9) the same, with the addition of a wing, (10) two-storeyed rooms without a verandah, and (11) two-storeyed rooms with a verandah. The cells vary in height from 3 feet square—mere sentry boxes, where a monk could only squat—to long rooms, like Jagannāth, 27 feet 4 inches long and 6 feet 8 inches broad. The height also varies generally from 3 feet to 4½ feet, but in the Trisūla cave it rises to 8 feet. The cell is plain inside, but there are Jaina images in several of the Khandagiri caves, which apparently were looked upon as temples. Besides the images, certain auspicious symbols are found on the back walls of Tātwā I and Ananta. Except in the temple caves, the cell-floor is raised and curved at the inner ends, evidently to serve as pillows for monks. These cells must therefore have been meant for residence, *i.e.*, were *lenas*. Benches are found only in

the Trisūla cave, where they may be a later addition, for its height also is abnormal. The ceiling is generally flat, and is arched only in the Haridāsa, Jagannāth and Pātālapurī caves in Udayagiri, and in Tātwā I and Ananta in Khandagiri.

The carvings are found chiefly on the front wall of the cells, which have one to three doorways, according to their size. The doorway is oblong and has a groove about an inch wide, cut on each side, probably for a *jhāmp* or bamboo-framed movable door. In the open caves and single cells without a verandah a horizontal excavation is found above the doorway, 4 to 6 inches wide, the object of which is not clear. Some of the doorways are simple, but most of the cells with verandahs and some of those without pillared verandahs have doorways with side pilasters, a tympanum and a tympanum-arch within two semicircular lines. The verandah is short or long according to the size of the back rooms. It is generally benched inside, and many have stone shelves over the benches across the side walls. In some caves no regular verandah exists, the cell-top projecting to form a cover, and being sometimes carved into the figure of some animal, *e.g.*, a tiger's face or snake-hood. Generally, however, the verandah roof is supported on side walls, and in front on pilasters, with one or more pillars. The ends of the verandah are often marked by guards varying in height from 4 feet 3 inches to 4 feet 7 inches. These figures usually have bare legs and are armed with a spear, but other shapes are also found, *e.g.*, a goddess on a lion and a god on a bull or elephant in the upper main wing of the Queen's Palace, a pot-bellied man and a kilted soldier in the upper right wing of the same cave, and a female with a male in the Jayabījaya. The ground in front of some important caves has been levelled to form a courtyard, *e.g.*, the Queen's Palace, Ganesha, Manchapurī, Jambeswara, Ananta, Bārabhujī and Trisūla.

The carvings are rude but vigorous, showing males and females in different attitudes and postures sufficiently expressive of various emotions, such as pain, eagerness, despair, pleasure, devotion, etc. The stiffness and immobility so characteristic of primitive art have been overcome by the artists, and there is a faint idea of perspective, *e.g.*, elephants are shown one behind the other. Among the figures of animals, elephants are, as a rule, well carved; and the execution is fair in the case of horses, deer, monkeys and geese. The trees are somewhat stiff, and so are the fruits and flowers with creepers and lotuses, displaying none of the beautiful carving of conventional foliage seen in the Lingarāj and other Bhubaneswar temples. But plant life on the whole Carvings.

appears to have been depicted with care. The hill scenery on the sentry boxes and in the second compartments of the Queen's Palace and the Ganesha cave is peculiar and does not appear elsewhere in Orissan architecture. The hill peaks are represented by triangles, a feature which also appears in Ajanta paintings.

Domestic life is represented with fair success. The males wear clothes like modern wrestlers, *i.e.*, folded and wrapped round the waist and thighs, and then tied into a knot, leaving one end hanging down. The women, specially those of higher rank, wear fine and, it may be, diaphanous clothes (*sāris*), in some cases shown merely by a fold on the leg; but, as with the males, no cloth is worn above the waist. The ladies and the chiefs are bejewelled, one peculiarity being their heavy earrings, a feature found also in the Amrāvati sculptures. The head-dresses are extremely varied, and some distinctly ingenious. Many objects of indoor and outdoor life have been depicted, *e.g.*, a cave doorway, a two-storeyed house, seats, stools, bedsteads, plates, jars, musical instruments of four kinds, umbrellas, ropes, trappings of horses and elephants, swords (all straight) naked or in the scabbard, oblong shields, bows with arrows, etc. Religious life is also pourtrayed, *e.g.*, a pavilion on posts forming a temple or part of a temple, a family dancing in religious ecstacy, the procession of a saint, the worship of trees, etc. The *Srī* and the sun-god are specially represented, besides a number of auspicious symbols. Several caves in Khandagiri contain images of Tīrthankaras, which, even if of a later date than the caves, are interesting as examples of mediæval Jaina hagiology, while, if contemporaneous, they are the oldest existing specimens of Jaina Tīrthankaras and their consorts. The prominence given to Pārsvanāth, whether among the images or by the use of his symbol, the serpent-hood, is curious, for in other existing remains Mahāvīra is the greatest of all the saints. The preference for Pārsvanāth may point to the early age of the remains, and if so, they are unique specimens of Jaina iconography. So little is known about this great preacher, who lived, according to Jaina chronicles, 250 years earlier than Mahāvīra or about 750 B. C., and whose law recognized but four vows and allowed an under and upper garment,* that the sculptured record contained in these caves, scanty as it is, cannot but be welcome to the antiquarian.

The chronology of the caves. The period in which the caves were made has been the subject of much discussion, but recent research has done much to

* *Uttarādhyāyana-sūtra*, Lecture XXIII, transl. H. Jacobi, S. B. E., Vol. XLV, p. 121.

elucidate this vexed archæological question. The date of the Hātīgumphā cave has been deduced from Khāravela's inscription and is believed to fall between 158 and 153 B.C. Nine caves, viz., Swargapurī, Manchapurī, Sarpagumphā, Bāghagumphā, Jambeswara and Haridāsa in Udayagiri, and the two Tātwā caves and Ananta in Khandagiri, have inscriptions in Brāhmī characters resembling those of Khāravela's; and as these characters were changed after the first century B.C., they cannot reasonably be placed later than that period. On the present data, these nine caves were apparently excavated not much later than Hātīgumphā or not earlier than the second century B.C. Possibly, however, some of these as well as some of the other caves may be earlier than even Hātīgumphā, for king Khāravela would naturally have selected the hill for his inscription because it had already become sacred from being the retreat of Jaina monks. These monks must have had caves, both natural and artificial, to live in; and as at least half a century may be allowed for the place to become sacred enough to move a royal family to spend large sums in excavation, *lenas* existed in these hills by the third century B.C.

The existing facts do not conflict with this supposition, for a century before the Hātīgumphā inscription, Orissa had become a part of the great Mauryan empire, and must have shared in the spread of religious culture due, among others, to the *nigranthas* mentioned in the edicts. In the second century A.D. Nāgārjuna, the great Buddhist preacher of Mahāyāna, is said to have converted the king of Oṭisha (Orissa) and many of his subjects to Buddhism; and it is permissible to infer that after that time Jaina influence declined and the excavation of Jaina caves stopped. On the whole, the 3rd century B.C. to the 1st century B.C. may be roughly taken as the period during which most of the caves were excavated. The biggest cave, the Queen's Palace, has unfortunately no inscriptions to point out its date. But its long suite of rooms, extensive rows of pillars and pilasters, vigorous bas-reliefs, and other elaborate carvings, presuppose a very rich donor, probably a powerful king and possibly Khāravela himself, who, according to the inscription, made pillars (caves) in Patālaka, Chetaka and Vaiduryagarbha, in the mountain peak near the seat of *arhats*, by skilful masons and ablē craftsmen with numerous designs, etc.

Signs of subsequent occupation are found in some of the caves, *e.g.*, the inscription, in the Nabamuni, shell, elephant and Ganesha caves, and possibly the images of the saints in the

Khandagiri caves (except Ananta). The Jainas were very influential in the Deccan from the 8th to the 11th century;* and the characters of the inscriptions belong to this period. It is not known how they lost their hold; but their influence declined with the rise of Vaishnavism, and traditions in the palm-leaf chronicles record their persecution by a Ganga king at the instance of the Brāhmans. During the period of British rule the Jaina Parwārs of Cuttack built the Jaina temple on the crest of Khandagiri, made masonry verandahs for the twelve-handed and Trisūla caves, and built the small temple in front of these two. The white pillars which look so out of place in the verandahs of the Queen's Palace, and the Alakāpurī, Khandagiri, and Sātabakhriā (*i.e.*, Bārabhuji and Trisūla) caves were put up by some Government officer apparently after 1869-70, as they do not appear in Mittra's plates. In 1902-03 the Public Works Department removed the masonry verandah of Sātabakhriā, put up a shade over the elephant inscription, repaired the elephants of Ganesha, and also carried out repairs in some of the caves.

Their number, age and carvings make these caves the most interesting in Eastern India. First noticed by Stirling in the Asiatic Researches, Vol. XV (1824), some of the caves were described by Fergusson in his "Illustrations of the Rock-cut Temples of India (1845), and fuller descriptions are given in Rājendralāla Mittra's Orissa, Vol. I., Chapter I, in Beglar's Report, Archæological Survey of India, Vol. XIII, and Bābu M. M. Chakravarti's notes on the caves, 1902. Fergusson also dealt with them in his History of Indian and Eastern Architecture (1876) and Cave Temples (1880)†.

Khurdā.—Headquarters of the subdivision of the same name, situated in 20° 11′ N. and 85° 38′ E. on the high road from Cuttack to Ganjām in Madras; the town is 7 miles from the Khurdā Road railway station, with which it is connected by a good metalled road. Originally a small village in *pargana* Dāndimāl, Khurdā came into prominence when the descendants of the Bhoi kings made it their capital during the Mughal rule. These kings lived in a fort at the foot of the Bārunai hill, a mile to the south of the town. This site was apparently selected because it was protected on one side by the Bārunai hill, which was easily defended, and on the other by dense, almost impenetrable, jungle. The fort was taken, however, by the Marāthās in the time of

* R. G. Bhandarkar, *Early History of the Dekkan*, 1896, p. 59 et. seq.

† The map of the caves annexed has been prepared with the help of a site plan kindly lent by the Superintendent, Archæological Survey, Eastern Circle.

Vīrakishoradeva; and during the Khurdā rebellion of 1804, it was carried by storm by the British troops after a siege of three weeks. The fort is now in ruins, but traces of its walls and ramparts still remain, and there are many mounds marking the sites occupied by the buildings of the Rājā's palace. On the northern slope of the hill, at a height of about 150 feet above the plain, is the temple of Bārunai, at which a large fair takes place during the Raja Sankrānti festival in June every year. The hill contains several caves, of which the largest is one known locally as *Pāndabguhā*, which is said to be capable of holding 100 persons. Rows of low rocky pallets line the floor, and it has obviously been the residence of Hindu ascetics (*jogis*). There are numerous pilgrims' records in it, but the inscriptions are of no special interest, though some are of considerable age, *e.g.*, that of Makaradhwaja Jogi, dated 900 of an unspecified era (probably the Chedi era), another dated Sambat 780 of no specified era, and three others inscribed in old Kutila characters.

The town, which has a population of 3,424 according to the census of 1901, contains the usual public offices, a sub-jail, a dispensary, and inspection bungalows of the Public Works Department and District Board. The climate is dry, and the roads, being laid on rocky soil, are good. The local name of the town is Jajārsingh. Water is taken to the Subdivisional Officer's residence by means of aqueducts from springs in the Bārunai hill.

Khurdā Subdivision.—Western subdivision of the district, lying between 19° 41′ and 20° 26′ N. and 84° 56′ and 85° 53′ E., and extending over 971 square miles. It is bounded on the south-west by the Chilkā lake; on the south by the Dayā river, which separates it from the Purī subdivision; on the north by the Cuttack district and the State of Khandparā; on the west by the Tributary State of Ranpur and the Ganjām district in the Madras Presidency. Along the Dayā river the country is flat and alluvial; but with this exception, the subdivision is covered with long ranges of hills rising to over 1,000 feet in height, which run an irregular course from north-east to south-west, breaking up the country into cultivated valleys drained by small streams. The most conspicuous hills are Solāri in Bānpur near the Chilkā lake, Bhelāri on the south-west boundary, Boita in *zilā* Kuhuri, west of the Chilkā lake, and Bārunai one mile to the south of Khurdā town. None exceed 1,800 feet in height.

A natural watershed crosses the subdivision and separates the Chilkā lake from the Mahānadī valley. In the western part of

the subdivision the waters run into the Mahānadī by means of the Kusumi; on the north the country is drained by the Ran and other small streams; and on the east and south the waters find their way direct into the Chilkā lake. The Dayā river, which is the main branch of the Koyākhāi river, and which inundates the surrounding country in the rainy season, connects the Chilkā with the district of Cuttack.

The population of the subdivision was 359,236 in 1901, as against 331,423 in 1891, its density being 370 persons to the square mile. It contains 1,212 villages, one of which, Khurdā, is its headquarters. At Bhubaneswar are situated the Lingarāj and other fine old temples, while the Khandagiri and Udayagiri hills contain many caves of great archæological interest.

Khurdā formed the last portion of territory held by the independent Hindu dynasty of Orissa. The Marāthā cavalry were unable to overrun this jungle-covered hilly tract, and the ancient royal house retained much of its independence till 1804, when the Rājā rebelled against the British Government and his territory was confiscated. A rising on the part of the peasantry took place in 1817-18, due chiefly to the oppression of the minor Bengali officials. The insurrection was speedily quelled, reforms were introduced, and grievances redressed; and at the present day Khurdā is a prosperous and well-managed Government estate. The current settlement dates from 1897, when the demand was assessed at 3·77 lakhs. The present Rājā of Khurdā is superintendent of the temple of Jagannāth, but has delegated his powers as such for five years to an experienced Deputy Magistrate-Collector.

Kodhār.—An estate situated in the extreme north-east of the district with an area of 5·8 square miles. At the time of the British conquest, the estate was in possession of the Mahant of the Uttara-pārsva *math*, its revenue being nominally devoted to the expenses of the *mohanbhoga* of Jagannāth. In 1834, when the claims to revenue-free estates were enquired into, it was found by Mr. Wilkinson that the Mahant had no proprietary right to the estate and had only been granted an assignment from its revenue from the Marāthā Raghujī Bhonslā. It was accordingly resumed in 1839. At the settlement of 1843 the estate was let in farm at a *sadar jamā* of Rs. 6,739 to the former *lākhirāj-dār*, and as he defaulted after one year, the farm was leased to Jagamohan Rai Churāmani, who continued to hold it till the re-settlement of 1865-66. In 1865 the Collector proposed to let out the estate in farm with a net *sadar jamā* of Rs. 8,906, and the opportunity was taken to convert certain money payments made

to the Uttara-pārsva *math* and to the Jagannāthballabh charitable endowment into a grant of land from the Kodhār estate. Fifteen villages, yielding a rental of Rs. 3,690, were accordingly made over to the Uttara-pārsva *math* on payment of Rs. 39-7 as quit-rent, and eight villages were similarly transferred to the Jagannāthballabh endowment, a sum of Rs. 57-9 being fixed as the quit-rent to be paid in perpetuity by the endowment for the assigned lands. The ten villages which remained as *khās mahāl* form a compact estate to the west of the Kodhār *pargana*.

A record-of-rights was prepared and a settlement of rents effected for the estate in the last settlement of Orissa. The rent-roll is Rs. 5,551, and the average incidence of rental is Re. 1-10 as compared with the district average of Re. 1-15 per acre. The estate is subject to inundation from the Devī river, and the lands are not very fertile, including a considerable area of sandy scrub jungle.

Konārak.—A ruined temple in the headquarters subdivision situated 21 miles north-east of Purī town in 19° 53′ N. and 86° 6′ E. The temple is also known as the Black Pagoda, a name given to it by captains of coasting vessels, for whom it formed a prominent landmark. It was dedicated to the sun-god (*Arka*), and the tract in which it lies is called in Sanskrit the Arka or Padma Kshettra. In this tract, the chief holy sites were, according to the *Kapila-samhitā* (a guide-book composed probably in the 14th century), the sun-temple, the Maitreya woods, the paols called Mangalā and Sālmali-bhānda, the sea, the god Rāmeswar, the tree Arka-bata, and the river Chandrabhāgā. All these sacred sites have now disappeared, and cannot be traced, except the first and the last, and the eternal sea. The sea is about a mile and a half to the south-east of the temple, while the Chandrabhāgā is now an insignificant stream, about half a mile to the north. Its mouth is closed by a sand-bar, through which, however, the tidal water forces its way during the rains. At present, it drains only the neighbouring tract; but depressions exist indicating that it was once a branch of the Prāchī and flowed nearer to the temple. Like that river, it has evidently suffered by the diversion of the water of the Kātjurī into other channels, and by the silting up of its bed owing to the drifts of sands blown by the south-easterly winds. Its name, it may be added, is borrowed from that of the larger river in the Punjab, with which the sun-god is connected in the *Samba-purāna*.

Arka Kshettra.

The legend, as given in a slightly modified form in the *Kapila-samhitā* and the palm-leaf chronicles, is that Sāmba, the handsome son of Krishna and Jāmvavatī, was detected by his father

Legend of Sāmba.

behaving improperly with his step-mothers. Krishna thereupon cursed him; and he became a leper as white as snow; but yielding to his pitiful entreaties, Krishna relented so far as to promise that he might be cured by the grace of the sun-god. Sāmba now began a rigorous penance in the Maitreya woods, and there the sun-god appeared to him and cured him of his leprosy. His beauty was miraculously restored, and the grateful Sāmba thereupon established the worship of the sun-god on the bank of the Chandrabhāgā. The *Kapila-samhitā* locates at Koṇārak the story of Sāmba and his miraculous cure from leprosy by the help of Sūrya. But the original *locale* of this tale was the north-west of India, and thence it was transplanted to Orissa in order to enhance the sanctity of Konārak, or to gain for it popular recognition as the true place where sun-worship should be performed.

Building of the temple.

All records agree in ascribing the erection of the temple to king Narasinhadeva, who ruled from A. D. 1238 to 1264.* Inscriptions record the fact that he built a temple to the sun-god at Konākona, from which it appears that the modern name stands for *Konārka*, meaning "the *arka* (sun-god) at Konā." According to local tradition, its construction took 16 years—a not improbable fact—and it will be safe therefore to ascribe the date of its completion to the third quarter of the 13th century. The first account of the temple which we find apart from the Orissa records, is in the *Ain-i-Akbari* of Abul Fazl, which was based on reports furnished to the Mughal Government. It is as follows:— "Near Jagannāth is a temple dedicated to the sun. Its cost was defrayed by twelve years' revenue of the province. Even those whose judgment is critical, and who are difficult to please, stand astonished at its sight. The wall is 150 cubits high and 19 thick. It has three portals. The eastern has carved upon it the figures of two finely designed elephants, each of them carrying a man upon his trunk. The western bears sculptures of two horsemen with trappings and ornaments and an attendant. The northern has two tigers, each of which is rampant upon an elephant that it has overpowered. In front is an octagonal column of black stone, 50 yards high. When nine flights of steps are passed, a spacious court appears, with a large arch of stone, upon which are carved the sun and other planets. Around them are a variety of worshippers of every class, each after its manner, with bowed heads, standing, sitting, prostrated, laughing, weeping, lost in amaze, or wrapt in attention, and following these are strange animals which never existed but in imagination.

* J.A.S.B., LXXII, 1903, Part I, p. 120.

It is said that, somewhat over 730 years ago, Rājā Narsing Deo completed this stupendous fabric and left this mighty memorial to posterity. Twenty-eight temples stand in its vicinity, six before the entrance and twenty-two without the enclosure, each of which has its separate legend." *

Materials. It is clear that the labour and expense of constructing this huge edifice must have been enormous. Even now the porch, though without the finial (*kalasa*), is 128 feet high; and the tower must have been nearly 190 feet high. Gigantic blocks of stone and massive iron beams were used. The architrave of the eastern doorway with the images of the nine planets (*navagraha*) was 19 feet by 3 feet by 3 feet and was supported by an iron beam measuring 22 feet 10 inches by 9 to 10½ inches square. The iron beams supporting the stones of the false ceiling inside were from 12 to 20 feet long, and one was found to be 21 feet long and 8 inches square. Not only were the iron girders of great size, but it is noticeable that their thickness gradually increases from the ends to the centre "showing," according to Fergusson, "a knowledge of the properties and the strength of the material that is remarkable in a people who are now so utterly incapable of forging such masses." †

The fact that the smiths of six centuries ago should have been able to weld such enormous masses in their primitive forges has excited much wonder, and the secret of manufacture has hitherto been unknown. The methods employed are, however, explained in a note kindly communicated by Mr. M. H. Arnott, Superintending Engineer, who was for some time in charge of the repairs to the temple. He writes:—"In removing one of the girders it fractured and the secret of its structure was revealed. It was a whitened sepulchre, and its construction was as follows. The iron was wrought into small lengths about 1 foot to 1½ feet in length and from 3 to 4 inches square, and these small lengths were placed end on, and side by side, somewhat in the same way as bricks are placed, overlapping one another, to form a wall. But in the interior, owing to each small length not being of exactly similar size, and, I suppose, to carelessness in fixing the lengths, voids were plentiful; and, in the piece I examined, some of the voids were large enough for me to insert my hand. What the smiths undoubtedly did, after they had put the lengths together, as described above, was to pour in molten iron round

* Jarrett's translation.

† Fergusson, *History of Indian and Eastern Architecture* (1891), Book vi, ch. 2, p. 428.

the four sides of the girders; and some of this must have penetrated into the interior and thus effected a partial welding of the small lengths inside. At the same time, it made a beautifully polished surface and gave the beam an appearance of great solidity and strength."

Apart, however, from this ingenious method of manufacture, the power of the builders to move great blocks of stone is wonderful. A striking instance of their resources is afforded by the fact that the crowning stone slab (*kalasa*) of the temple is 25 feet thick and is estimated to weigh not less than 2,000 tons.* Equally remarkable is a huge piece of sculpture, which still lies among the debris. It represents the usual lion rampant upon an elephant, which is commonly seen projecting from the front of the spire in the temples of Orissa. The height up to the top of the lion's head measures 20 feet; the base is 15 feet long, and 4 feet 7 inches broad. This colossal figure was cut out of two solid blocks of stone, and both these stones had to be raised to a height of 150 feet above ground, where they were fastened into the wall. Moreover, there are no stone quarries within a radius of 25 miles, and no steatite slabs like those found in the temple are available within 80 miles. It is quite possible, however, that the temple originally stood close to the sea-shore, and that one of the small rivers near it was then navigable for rafts, at least during the rains, thus affording means of transport for the huge blocks of stone used in building, which were brought from the hills near Khurdā or even further away. As regards the raising of the building materials, there is a story that the structure was embedded in a sand hill, and that the huge stones were carried up the slopes of the hill by rollers.†

Not only was the general design on a Titanic scale, but the temple was adorned with minute and elaborate carvings and with statuary of a finished type. Every part of the building outside is more or less carved or filled with images, *e.g.*, the porch, the flight of steps, the pavement, the base, the body of the edifice, the doorways, the cornices and recesses of the roofs, etc. In each doorway the eight rows of carvings, if joined together, would be nearly 400 feet long; while the frieze on the roof of the porch along extended over nearly 3,000 feet and contained at least twice that number of figures. Many of these arabesques and animal figures are in the best style of Indian art.

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* Report, Arch. Surv. Ind., 1903-04, p. 9.

† Report, Arch. Surv. Ind., 1902-03, pp. 48-49.

It is no wonder therefore that the temple has extorted admiration from numerous critics,* from the time of Abul Fazl. An idea of its grandeur even in its present state may be gathered from the remarks of Mr. Marshall, Director-General of Archæology:—"There is no monument of Hinduism, I think, that is at once so stupendous and so perfectly proportioned as the Black Pagoda, and none which leaves so deep an impression on the memory. When Fergusson wrote of it so admiringly, he had seen but half of its beauty. The deep and richly carved basement with the horses and chariots of the Sun-God had not been unearthed in his day, nor were any traces visible of the massive dancing hall in front, which makes such a splendid addition to the main building. Even now the shrine remains buried in sand and debris, and it will be several years still before the whole of the temple—or rather what remains of it—can be seen in all its beauty."

The question naturally arises why this magnificent temple was erected in such a dreary barren sandy waste, far from any town or centre of trade. The answer to this question lies probably in the hydrography of the district. Centuries ago the Prāchī (literally the east) was a large navigable river. On its banks are still found temples, remains of temples and brick houses, and mounds marking old village sites. The temples were so numerous and their sanctity was so great that a special guide-book was compiled under the name *Prāchī-Mahātmya*. Tradition speaks of an old port at its mouth which, if true, might, with some reason, be identified with the port of Che-li-ta-lo that lay to the south-east of the capital of Wu-t'u (Oda or North Orissa) in the time of Hiuen Tsiang, *i.e.*, in the sixth century A.D. Round Konārak existed a number of flourishing villages with Brāhman colonies, and the Chandrabhāgā was then apparently a large river. The palm-leaf chronicles speak of a temple to the sun erected here by a Kesarī king in the latter half of the ninth century, and apparently this date is referred to in the *Ain-i-Akbarī*, where the temple is described as being 730 years old (1590—730=860). The chronicles add that, seeing the dilapidated state of the old temple, king Narasinhadeva caused the present temple to be erected in a marsh, called *Padmatolā ganda*, *i.e.*, the lotus-raising pool. One may dimly discern the reasons for the erection of this great temple in the 13th century,

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* *Ain-i-Akbarī*, Jarrett's translation, II, 128-9; Stirling, *Asiatic Researches*, XV, 326; Fergusson, *Picturesque Illustrations of Ancient Architecture in Hindustan*, pp. 27-28; Hunter, *Orissa*, I, p. 288; R. L. Mitra, *Antiquities of Orissa*, II, 145; Archæological Survey Report of India, 1902-03 and 1903-04.

and it is at least certain that since then the waters of the Kātjurī have been diverted from the Prāchī to the Devī, the Kushbhadrā and the Koyākhāi. The flourishing villages have disappeared; sand has drifted northwards and westwards, obliterating all traces even of cultivation; and the temple alone has withstood the attacks of time and climate, bearing melancholy testimony to the past civilization of the land.

Legends. Many curious legends are related about the construction and desecration of the Konārak temple. Out of the mist of legends about the construction of the temple two may be selected. The first is taken from the palm-leaf chronicles, and the second is current in the neighbouring villages. Rājā Narasinhadeva, it is said, ordered his officer Sivāi Sāntrā to erect a temple at Konārak in honour of the sun-god. When the stones were being thrown into the lotus-covered pool at the sacred site, they were swallowed by Rāghab fish. This untoward circumstance deeply distressed Sivāi Sāntrā, who slept before the goddess Rāmachandī in fervent *dharnā* (supplication). The goddess, assuming the shape of an old woman, appeared before him, and having asked him to take some *bhogas*, handed him a leaf covered with some *khīr*, *i.e.*, a confection of rice and milk. Sivāi put his hand into the middle and was scalded, at which the goddess said:—"You are doing just as Sivāi has been doing in order to build his temple. The stones are being thrown in the middle and are being swallowed by the big Rāghab fish. They should be thrown in from the sides." On hearing this, Sivāi Sāntrā had the stones cast in close to the sides of the pool, and thus gradually built up a foundation upon which the temple was erected.

Another legend runs that for 16 years 1,200 carpenters and masons worked in building the temple. One of them had left a boy at home, and when he had grown to manhood, his mother sent him in search of his father. As a sign by which the young man might know his father, she gave him the fruit of a *barkoli* tree that grew in the courtyard, telling him that only his father could identify it. After long wandering he came at last to the temple, where he showed the fruit and found his father, who alone could name the place from which it had come. After finishing their day's work, the masons went away; but the son worked the whole night, and completed the porch up to the *kalasa* or final vase. Next morning, the artisans saw with surprise this astounding feat and learnt that the work had been done by the new-comer. They then angrily asked his father if he preferred his son to all his fellow-workmen; for they said:—"If your son is allowed to go on in this way, he will soon

finish building the temple; and we will lose not only our daily bread, but also our lives, for the king will think we have been neglecting our work." The father then sorrowfully declared his preference for his fellow-workers, climbed to the top, where his son was still working, and hurled him down to the pavement below. But a curse fell on the work, and the porch was left unfinished up to the final vase.

A quaint legend is told about the desertion of the fane. It is said that a lode-stone of immense size was formerly lodged in the summit of the great tower, which, like Sinbad the sailor's rock, had the effect of drawing ashore all vessels passing near the coast. At last, in the time of the Mughal rule, the crew of a ship landed at a distance, and stealing down the coast, attacked the temple, scaled the tower, and carried off the lode-stone. The priests, alarmed at this violation of the sanctity of their shrine, removed the image of the god to Purī, where it has remained ever since; and from that date the temple became deserted and went rapidly to ruin.

Fall of the tower.

To leave these misty but picturesque legends and come to more prosaic details, the ruin of the temple was probably due to the fall of the tower, which is the subject of several theories. It is ascribed by some to earthquake or lightning, by others to the failure of the marshy or sandy foundation to support so enormous a mass, and by others again to faulty construction. It seems probable that the growth of trees and plants loosened the dome and the topmost stone slabs, which then fell down during one of the strong south-easterly gales which lash the coast. Their fall removed the pressure that had kept the stones of the corbelling roof in bond, and gradually these stones of the horizontal arches dropped. This is confirmed by the fact that the lower cubical body is still standing intact, and that most of the stones dropped inside the tower or just outside the cubical body.

Architecture.

The theory that the ruin of the temple was due to faulty construction has been substantiated by Mr. M. H. Arnott, who writes:—"The portions that have suffered most are towards the west and the south. The corbelled stones on the western face are crushed and cracked, and evidently the corbelling of the interior was damaged when the temple was first constructed, *i.e.*, when the sand was removed from the inside. By this statement it will be seen that it is supposed that the temple was constructed on a heap of sand, the heavy stones ramped up, and when the work was completed, the sand from the inside was all removed by means of the four doors. If we accept this view, it will account for the state of the exterior and the interior of the

structure, as they exist at the present time; for the masonry being without any mortar, in any particular course, or at any particular height, the weight of the superincumbent mass must be borne by any stones that are not exactly level. They would of necessity get crushed, and in turn distribute the weight to the next stones that might be out of level, and this would go on until the weight came on to a sufficient number of stones, whose power of resistance was greater than the crushing weight. When once this point was reached, the structure took up a position of stable equilibrium, and all further damage ceased, except that caused by the natural disintegration and weakening of the stones through the lapse of centuries. In a perfectly constructed building of the Konārak design no damage would occur, but if any error crept in, or if through carelessness a single unequal course was built, the result to such a building would be the same as we see in the case of the Black Pagoda.

"Further, in a corbel-built structure, its equilibrium depends on the relative position of the centre of gravity of each individual stone, and of the structure taken as a whole; and if constructed without centering, the interior must be filled up with sand to enable construction to go on. This was experimentally proved by constructing a model of the Konārak temple with dry bricks to a scale of 1″ to the foot. It was found that, to keep the corbelling in place after a height of 30 feet from the starting point of the corbelling was reached, sand had to be kept below to widen the base, so that the weight of the corbelling fell within it, or weights placed on the exterior of the stones that were being corbelled; otherwise the structure collapsed. There is also another pressure tending to render the building stable, and that is the lean-to that comes into play from each wall on the other at the point when each wall would of itself tend to topple over, this being prevented by the support derived from the other two walls against which it is abutting. This pressure has two components, one of a compressive nature with a tendency to shorten the walls due to the pressure from the two opposite walls, and the resistance offered by the stones, of which the structure is composed, against the action of gravity. There is practical proof that the former pressure is no mean one in the temple itself; if the roof is studied, the large number of stones will be noticed that to all seeming should fall down, and which it would never be thought could possibly remain *in situ*; and the only reason that they do is due to this lateral pressure. The fact that this lateral pressure does exist goes to prove that the walls would fall if they were not supported the one by the other.

"Now, in order to counteract this, *i.e.*, to prevent the walls from buckling inwards, it is necessary to weight them. This can easily be proved by making two corbelled walls with bricks. If a weight is placed on top of two corbelled walls, they will remain; remove the weight, and the corbelled walls collapse. Corbelled walls, as in the Black Pagoda, have a tendency to fall in, and when a weight is placed on top of them, as long as it is great enough, the friction it exerts will resist and overcome this tendency. This friction in intensity depends on the weight and the extent of surfaces in contact. It would be extremely difficult to find out now with any degree of accuracy, whether the weight of the topmost portion of the walls was great enough to keep the building stable, or how much extra weight should have been put on top, and whether this weight, consisting of the melon-shaped dome known as the *amla* and the other portions of it, were just enough for the purpose; but it is most likely that it was erected without any scientific method, and with a view to effect as the ruling cause. As regards the melon-shaped dome, there can be no doubt, if what has been written above is accepted as fairly reasonable, that this weight is at the same time helping to support the walls.

"We have therefore this anomaly that the topmost weight is, at one and the same time, tending to destroy and also conserving the temple. It is nearly certain that the *Deul* fell from the same cause, viz., that when the sand was removed from the interior, the weight above was not great enough to resist the inward tendency of the corbelling to fall in. The heap of stones is direct proof that the result of the catastrophe, when it did take place, hurled the stones inwards and not outwards; had it been the latter, the heap would have been a scattered one, instead of which it is a remarkably compact one."

Work of restoration. The date of the fall of the tower is not known, but it is certain that the temple was in a ruinous state early in the 17th century. In 1627 the tower was so dilapidated, and the shrine so deserted, owing partly to the bigotry of the Muhammadan rulers, that Narasinhadeva, Rājā of Khurdā, removed the presiding image of the sun-god to the temple of Indra in the inner enclosure of the Jagannāth temple. The beautiful pillar in front of the eastern doorway was subsequently removed in the time of the Marāthās and set up in front of the Lion Gate before the Jagannāth temple. This was not the only loss the temple sustained, for Stirling states that the officers of the Marāthā Government demolished part of the walls in order to procure materials for building some insignificant temples in Purī. Part

of the tower to the height of about 120 feet was still standing in the time of Mr. Stirling (1822), and also in 1837 when Fergusson made a drawing of it; but it had entirely collapsed in 1869, when visited by Dr. Rājendralāl Mitra.

In 1901 Government directed its excavation from the sand in which it was buried, and the work of conservation was begun in 1902. This work is still in progress and the following improvements have been carried out:—the sand has been removed from the great courtyard; portions of the compound wall and certain platforms have been dug out; the structure in front of the porch has been cleared of sand, inside and outside; the base and flight of steps of the porch have been excavated, as well as the two elephant-lions, the two elephants, and the two horses placed at the foot of the flight of steps leading to the east, north and south doorways; the doorways and the spire of the porch have been repaired; the porch has been filled inside with stone and sand; the debris and sand round the base of the tower have been removed from the north-eastern corner; and casuarina trees have been planted on the south and east of the enclosure to prevent drifts of sand.

Description of the remains. This magnificent temple has sunk into a state sadly different from that which still delighted the world in the time of Abul Fazl, but much has been done to remedy the inroads of time and mischief, and enough is left to give an idea of its former splendour.

Temple. The temple compound was surrounded by a wall, and the principal gateway was to the east. The wall, which was oblong in shape, seems to have been 885 feet from east to west and 535 feet from north to south, and was apparently 7 to 8 feet thick and 25 feet high. It was surmounted by battlements, some of which now lie scattered about. Two long platforms have been laid open in the north-eastern corner of the courtyard, which were apparently used for bathing the images. But a more interesting discovery which has followed the excavation of sand is that of a fine hall with elaborate carvings in front of the porch. Its roof is gone, but a high basement and the body wall remain. The hall has four doors, one on each side, with two windows on the right and the left of each door. The inside is plain and devoid of ornament, but has four massive richly carved pillars which supported the roof. The carvings are of the same type as those on the outside walls of the hall, but not obscene. The four sides of the square pillars have been divided into two galleries, each consisting of a row of five ornamental pilasters adorned with figures of animals, musicians and dancing-girls. The hall

outside is covered with carvings of gods, celestial courtesans, human figures, musicians, etc., a few being suggestively but not directly obscene. Some call the hall a *bhoga-mandapa*, others a *nātmandapa*, and it may be one of the six temples mentioned in the *Ain-i-Akbarī* as having been before the entrance.

A little to the west of the hall rises a flight of broad steps, now broken, leading to the eastern doorway of the porch. The steps are 9 feet broad, and have side walls carved outside on each side with four horses and two wheels of 16 spokes, thus representing the flight of steps as a chariot on four wheels drawn by eight horses. The wheels are minutely carved, and the spaces between the wheels and horses have pilasters showing griffins, human-faced *nāgas*, heavenly dancing-girls, musicians, human figures, etc. They stand on a pavement crowded with elephants in various attitudes. At the foot of flights of steps, to the east, south and north, are now placed the guarding animals, two rampant lions over crouching elephants, two elephants crushing demons, and two horses trampling down enemies. The execution of the lions is conventional, but that of the elephants and horses is spirited.

The porch is a massive building on a high basement. The basement, including the pavement, is more than 16 feet high, and is carved with figures similar to those on the side walls of the steps. The body of the porch, which is 66 feet square, rises boldly for more than 60 feet, forming nearly a cube. It has four openings, the western leading to the tower. The eastern doorway retains to some extent its original state, though it has lost its *navagraha* architrave, and is a fine piece of work with its high opening, its black polished steatite sides, and its front carved elaborately with eight parallel rows of figures and traceries. The steatite sides have unfortunately been disfigured by scrawlings of many names, the oldest being "G. Hartwell, 1807." The outside body is covered with elaborate carvings and statuaries, many nearly of life size and obscene in character. The pyramidal roof is divided into three compartments, the two lowest of which are composed of six projecting cornices, separated by deeply recessed compartments containing sculptures as large as life; while all the faces of the projecting cornices are covered by bassi-relievi of processions, hunting and battle scenes, and representations of various occupations and amusements. Over the topmost ledge is placed a ribbed dome on crouching lions, with a bell over it, and over that a second dome. The vase-shaped finial (*kalasa*) at the top is gone. Except for a plain moulding at a height of 5 feet, the interior is plain. Just where the pyramidal roof begins

Porch.

to curve was a false ceiling composed of stones and mortar resting on iron beams and supported by four pillars. These fell down and littered the floor, but the debris has been removed, and the interior is now filled up with stones and sand to protect the sides.

Tower. The tower lies dismantled, but the recent removal of sand and stones from the north-eastern corner shows that about one-third still remains standing. The excavations have brought out the base and a large part of the cubical body. In the base a wheel has been discovered indicating that the lower structure was intended to represent the chariot of the sun-god. In the centre of the façade is found a small side chamber with a passage leading into the interior of the shrine. In a niche above it stands a finely carved chlorite figure of a man on horseback, probably Aruna, the charioteer of the sun. The base and the body wall are covered with carvings of the *alaṁkāras* and *kāmasūtras*. Recent excavations show that the sanctum was 32⅝ feet square inside, and that it contains a steatite throne for the image. During the removal of debris 16 fine sculptures have been found, which were probably statues placed in the outside niches of the tower and body of the porch.

Image, offerings and festivals. The presiding deity had the figure of Maitr-āditya, holding a lotus in each hand, with ornaments on the body and a crown on the head. It was seated on a chariot drawn by seven horses and guided by Aruna. The image can be still seen in the temple of Indra within the enclosure of the Jagannāth temple. According to the palm-leaf chronicles, the daily service consisted of eight *bhogas* or offerings of food, and there were 12 great festivals, the most important being held in the month of Māgh (January-February). It is still observed on the seventh *tithi* of the bright half of the lunar month, when a fair is held at Konārak, which is attended by a large crowd numbering from five to ten thousand. The worshippers gather at the place the previous night, and early in the morning bathe in the sacred pool formed by the Chandrabhāgā river and stand on the sea-shore close by to watch the sunrise, as it is believed that on this day the sun-god is seen with his chariot. They then visit the temple and worship the *navagraha* stone.

Nava-stone. This stone represents the nine planets and has an interesting history. Originally, it formed the lintel over the eastern door; twice it was determined to transport it to the Indian Museum, but the first attempt was soon given up for want of funds, and the second, made about 10 years ago, was suddenly abandoned on the discovery that the stone had become an object of local worship, a man from Purī having been cured by its miraculous virtues.

Carvings.

In conclusion, the carving of this stone and of other parts of the temple may be mentioned. According to Sir W. W. Hunter, "Sculptures in high relief, exquisitely cut, but of an indecent character, cover the exterior walls, and bear witness to an age when Hindu artists worked from nature. The nymphs are beautifully-shaped women, in luscious attitudes; the elephants move along at the true elephant trot, and kneel down in the stone exactly as they did in life. Some of the latter have, however, the exaggerated ear and conventional mouth of modern Hindu sculpture, and the lions must have been altogether evolved from the artists' inner consciousness. Among the life-sized pieces, elephants crouch in terror under rampant lions, while mutilated human figures lie crushed beneath the flat, pulpy feet of the elephants. Clubmen, griffins, warriors on prancing horses, colossal figures of grotesque and varied shape, stand about in silent, stony groups. The elephants have the flabby under-lips of nature, and exhibit a uniformity in all the essential points of their anatomy, with a variety in posture and detail, which Hindu art has long forgotten."

The obscene character of many of the carvings is most noticeable, but remarks Dr. Bloch :—"It should be borne in mind that the word obscene and the notion it conveys were unknown to the ancient Indians. In all the productions of Kālidāsa and of many another famous Sanskrit poet are numerous scenes and descriptions, the true meaning of which it would be difficult to explain to an audience of ladies, but there is not the slightest reason to suppose that any one in antiquity took exception either to these or to the realistic carvings of the Black Pagoda. Nothing indeed could be more unjust than to decry the people who made them as indulging in immorality, gross as the figures may seem to modern ideas.' *

Black Pagoda.

The tower and porch of the temple were visible from sea for a considerable distance, and therefore served as a landmark for mariners. In old logs and sailing directories it is mentioned as the Black Pagoda, apparently to distinguish it from the next landmark, the Jagannāth temple, which was sometimes called the White Pagoda. The earliest mention of these names appears to be found in the diary of Sir Streynsham Master, Agent and Governor of Fort St. George (Madras), who wrote as follows, when sailing from Balasore, after a tour of inspection, in 1675:— "December 23rd. We sailed in sight of the Black Pagoda and the White Pagoda. The latter is that place called Juggernat, to

* Report, Archæological Survey of India, 1903-04.

which the Hindus from all parts of India come on pilgrimage."* Another reference to the Black Pagoda and the "Jakernot" Pagoda appears in the log of a voyage along the coast of India in 1746†; in the French Map of Croisey, 1764 A.D. the temple is noted as Pagoda Noire; and the old sailing directory of Dunn (1780) says:—"Four leagues E. & N. of Jagrenath Pagoda is the Black Pagoda, which at a distance (like the former) resembles a large ship under sail; but on a nearer view it loses somewhat of its magnitude."‡

It may be added that the temple is difficult of access. It is situated near the northernmost end of the sandy strip that stretches from the Chilkā lake to the Prāchī river, and the only convenient means of transport is by *pālki*, the journey taking 7 to 8 hours, or by bullock cart, when the journey takes nearly twice as long. The road from Purī passes through a long stretch of sand or sand-hills, and if good riding camels could be secured, they would be a more rapid means of transport, except during the rains. A small bungalow has been lately built at Konārak for travellers and inspecting officers, but it is necessary to make one's own arrangements for food. Hindus can put up in a small *math* close by.

Kotdesh.—An estate managed by Government extending over an area of 138 square miles. The history of this estate is interesting. It is one of the seven great Orissa zamīndāris, properly so called, which existed at the date of the British conquest. The history of its origin is narrated in paragraph 24 of Mr. Stirling's Minute of 1821:—"The history of the great Kotdesh estate claims a more particular detail. It comprises three *parganas*, Kotdesh, Antrodh and Kālījori, and was originally divided, like every other part of the Mogulbandi, into the *tāluks* of the *chaudhuris* and *kānungos*. There were eight of these *tāluks* in *pargana* Kotdesh. During the Government of Bālājī Naik, Trilochan Patnaik, an Orissa Mahānti, was entrusted with the collection of revenue of *pargana* Kotdesh, etc., as *gumāstha* on the part of the Faujdār of Piplī, within whose jurisdiction these *parganas* were situated. Having distinguished himself by his zeal, activity and intelligence, he continued in charge, when that officer died, and at length having obtained the support of the Sūbahdār Rājā Rām Pandit, he proceeded to Nāgpur, and there by paying a large *nazarāna* obtained the zamīndāri *sanad* of the three *parganas* from the Rājā of Berar about A.D. 1775."

* *Diary of William Hedges*, edited by Col. Yule, II, 238.
† Indian Antiquary, 1901, p. 342.
‡ Horsburgh, *Sailing Directory*, 1809, p. 353.

Trilochan Patnaik died in 1792, and was succeeded by his son, Nārāyan Chhottrā, who in the following year obtained a fresh *sanad* of appointment from the Marāthās. Nārāyan Chhottrā was in possession of the zamīndāri, when Orissa came into our hands and the first engagements were taken from him. He died in 1824, leaving as heirs two sons, Bālkrishna and Krittibās. The former died in 1833, and the thirty years' settlement was concluded with Krittibās, who, previous to the settlement, had married his only daughter and heir to Bhagbān Rāitsingh and had made some assignment of the estate in his favour. Krittibās died soon after the settlement, and his son-in-law Bhagbān held possession till his death. He was succeeded by his two sons, Abhirām and Dhananjay, who each enjoyed a half share of the estate. In January 1896 the estate was sold by auction for arrears of revenue and purchased by the chief creditors of the old zamīndāri family. A seven annas share fell to the Bhagats of Cuttack town, a five annas share to the Chaudhuris of Bhingārpur, and a four annas share to the Mahant of Emār *Math* in Purī. The auction purchasers did not enter into an engagement with the Government at the last settlement of the estate in 1900, and consequently it has been held *khās*, being put in charge of a Sub-Deputy Collector who is assisted by a Tahsīl establishment for collecting the rents. The rent-roll is reported to be Rs. 1,76,657 and the revenue payable Rs. 1,04,351.

The estate is a fertile tract lying between the channels of the Kushbhadrā and the Bhārgavī, and is partially protected by embankments along the upper reaches of those rivers. It is marked in the north-west by a considerable diversity of level; and in the south-east it consists of an extensive plain subject to inundation in years of heavy flood. The north-east grows the lighter varieties of *sārad* rice, the south-west grows chiefly *bara dhān*. The average incidence of the rents as now settled is Rs. 2-2 per acre, and three-fourths of the estate is held by proprietary tenure-holders.

Pārikud.—A large estate with an area of $67\frac{1}{3}$ square miles held by the Rājā of Pārikud, who is the head of one of the leading families of the district. The family traces back its descent to Rājā Jadurāj, who was in possession of Pārikud and other territories in the time of the Mughal Government. It is said that he fought against the Subahdār of the Province on behalf of Nawāb Parsurām Rājā Pandit, defeated him, and received a large grant of land from the Nawāb as his reward. Towards the close of the Marāthā rule, the Rājā of Khurdā defeated the then Rājā of Pārikud, and deprived him of all his

land except Pārikud itself. At the time of the British conquest, the *jāgīrdār* of Mālud having assisted the British troops in their advance, was granted five *parganas*, including Pārikud, as *jāgīr*; while the Rājā of Pārikud, who had failed to support the British, was directed to pay his quit-rent to him. Rājā Chandra Sekhar Mânsingh, the predecessor of the present Rājā, showed great liberality in the famine of 1866 and was made a C. S. I.; the title of Rājā was recognized as hereditary in 1872. The present Rājā, Gaur Chandra Mānsingh Hari Chandan Murdrāj Bhramarbar Rai, received the title of Rājā Bahādur in 1898. The rent-roll of the estate is Rs. 27,652, and it pays a rent of Rs. 1,600 per annum to the *jāgīrdār* of Mālud, under whom the Rājā is a tenure-holder. The resources of the family have been largely reduced owing to the abolition of the salt manufacture on the Chilkā lake, and the estate is now under the management of Court of Wards.

Piplī.—A village situated on the Jagannâth Trunk Road, nearly midway between Purī and Cuttack, being 25 miles from Purī and 27 miles from Cuttack. It contains a police station, post and telegraph office, dispensary, and sub-registry office, and is the headquarters of a Public Works Subdivisional Officer. It is the centre of a considerable trade in rice and cloth, and is inhabited by many tailors, who prepare *batuās* or cloth-bags and *sujnis* or embroidered quilts, which are much prized by the Oriyās. The village also contains a colony of Native Christians, a mission bungalow, church and schools. The native Christians mostly belong to the American Baptist Mission Society, which sent its first missionary, an Oriyā named Daitāri, to Piplī in 1840. Piplī has figured somewhat prominently in the history of Purī. It was seized by prince Shāh Jahān in A.D. 1621, when he rebelled and advanced from the Deccan to Cuttack and thence to Bengal. Here the Marāthās were defeated in a pitched battle by the British in 1803, and the place was raided and sacked by the *paiks* during the Khurdā rebellions of 1804 and 1817. It was also the headquarters of the Settlement Officer for several years.

Purī.—Headquarters of the district situated on the shore of the Bay of Bengal, in 19° 48′ north latitude and 85° 49′ east longitude. It is about 50 miles distant from Cuttack by road and 58 miles by rail, and is 311 miles from Calcutta and 776 miles from Madras by rail. Its population rose from 28,794 in 1891 to 49,334 in 1901, the increase being mainly due to the presence of a large number of pilgrims who came to attend the Govinda-dwādasī festival. In the preliminary census the pilgrims were counted separately, and found to number 17,085. If these are

deducted, the resident population falls to 32,259 or only 12 per cent. more than in 1891. The inhabitants are almost exclusively Hindu, only 351 being Musalmāns and 110 Christians. The area included in the municipality is 4 square miles.

Nomenclature.

The present name Purī is not found in any Sanskrit or other works not written in the present vernaculars. Sanskrit and other old works refer to it as Purushottama, Purushottama-kshetra or Srīkshetra; and in Oriyā inscriptions of the 15th century it is called Purushottama Kataka (or camp). The *Ain-i-Akbarī* describes it as the city of Purushottama,* and this is the name given by subsequent Musalmān historians down to the author of the *Riyazu-s-Salātin*† who wrote at the close of the 18th century. Among Europeans, the city was known from an early date as Jagannāth, after its great god and temple. The first mention of the place by an European appears in the journal of Sir Thomas Roe, who refers to it as "the chief city called Jekanat"‡; and the earliest English visitor William Bruton, who came here in 1633, calls it "the great city of Jaggarnat" so called after "their great god Jaggarnat." The same name under various spellings is found in every subsequent account and was extended to the surrounding country and even to the whole of Orissa.§ As the present name Purī was not used formerly either by Hindus, Muhammadans or Christians, the question naturally arises how it has come to be adopted. It appears that after the British conquest, the town was sometimes called Jagannath-Pooree; and Mr. W. Hamilton in his Description of Hindostan (1820) mentions the city as Juggarnath, Juggernathpoor and Pooree, while Stirling in his Account of Orissa, published in 1824, uses both Jagannath-Pooree and simply Pooree. Evidently, therefore, the latter name commended itself to popular taste as a handy abbreviation, and displaced the older and more correct name Jagannāth or Purushottam, the lord of the world, whose temple has made the town famous throughout India.

The *kshetra.*

Not only is the temple holy, but also the whole of its precincts, the *kshetra*, extending over five *kos* or 10 miles, which the pilgrims are solemnly enjoined to circumambulate as in other sacred cities. The *kshetra* extends from the Lokanāth temple on the west to the Baleswara temple on the east, and from the Swarga-dwāra or gate of heaven on the south to the Mātiā stream on the north east. This sacred tract is said to resemble in shape

* Jarrett's translation, II, 127.

† Abdus Salām's translation, Bib. Ind. Ed. pp. 302-3.

‡ Hak. Soc. II, 538: Pinkerton's Collection of Voyages and Travels, VIII, p. 54.

§ Jeane de Thevenot's Travels, III, p. 67; Bernier's Voyage to the East Indies.

a conch-shell navel (*sankha-nāvi*), in the centre of which lies the Jagannāth temple. It does not appear that the place is mentioned in any very ancient works. It is true that in the Mahābhārata, Vanaparva, Ch. 114, there is a description of a sacred altar on the sea-coast between the Baitaranī river on the north and the Mahendra mountain on the south, where Yudhisthira, the eldest brother of the Pāndavas, offered oblations of water; but it is doubtful if this site should be identified with Purī town. In the travels of Hiuen Tsiang or Yuan-Chwang (640 A.D), Kong-Yu-to, which is identifiable with southern Orissa, is said to contain some tens of towns stretching from the slopes of the hills to the edge of the sea, but in the absence of other details it cannot be said that Purī was one of them. The attempt of Dr. Rājendralāl Mitra to identify it with Dantapura, the capital of Kalinga, is also not entertained by more recent authorities. It is mentioned only in some of the latest Purānas, sporadically in the Padma Purāna, and in a separate section called the Purushottama-māhātmya annexed to the Skanda, Kūrma and Nārada Purānas.

Bālukhand. The town includes two distinct portions, the Bālukhand or sandy tract along the sea, and the town proper. The inhabited portion of the Bālukhand stretches between two sacred *tīrthas*, the Swarga-dwāra or heaven's gate and the Chakra-tīrtha. The central portion of this tract is occupied by the various public offices, the criminal, revenue and civil courts, the offices of the police, the District Board and the Customs, the post office, the circuit-house, the flagstaff with the meteorological observatory, the inspection bungalow, the dāk bungalow and the church. Further to the north-east lie the bungalows of the officials, beyond which have been built several houses ending on the right (near the sea) in the cemetery and on the left in the railway station. Parallel to the beach for about a mile runs a road built of tiles laid firmly on the sand, with benches at intervals, which may be described as the Purī Parade. Behind the Customs office have been built in recent years a number of houses, which, with the quarters of the Nuliyā fishermen, extend southwards up to Swarga-dwāra, the site of which is marked by a stone block. Round the latter cluster a number of *maths* or monasteries, among which the Kabīrpanthi and Sankarāchārya are prominent. The latter *math* is said to have been founded by Sankarāchārya himself, and is evidently of considerable age, as the sand, barely kept back by cactus fences, rises all round into a high dune. It has a fine library containing about 1,200 manuscripts, of which some are 300 to 400 years old. Close by is a monument said to mark the grave of Haridāsa, the well-known Musalmān follower of Chaitanya.

The Bālukhand is narrowest at its south-east end (the Swarga-dwāra), where it is only a little over quarter of a mile broad, and then widens till it is nearly a mile at the other end. Excepting the Swarga-dwāra portion, the whole of it belonged formerly to a zamīndār, from whom it was bought by the Purī Municipality and then resold to Government. Leases for building purposes are given by the Collector for 30 and often 50 years, at a high rental, but so great is the demand for houses on the beach that all the available land has now been leased out. This sandy tract is intersected by several roads, along which have been planted fine avenues of casuarina trees, which tend to prevent the sand blowing inland.

The sea is shallow for about a mile from the beach; and even in the calmest season, the winter, all vessels have to lie off a considerable distance, the goods and passengers being taken to the shore by the catamarans of the Nuliyās. During the monsoon the sea is so rough that no ship can come within a mile of the shore. "The surf," wrote a visitor in 1829, "breaks with such violence on this shore during the monsoon, that no European boat could live for an instant amongst its curling breakers—communication with ships from the shore being carried on, as at Madras, by the native surf-boats. Of these there are two kinds, the mussoola and the catamaran. The former is deep, spacious, and extremely light, not a particle of iron being used in its construction: the planks are sewed together with thongs and the sides, though tough, are so elastic, that they yield visibly when struck by a sea. The catamaran, which is not calculated to carry anything but the amphibious being who guides it, is a sort of raft, formed merely of three long timbers rudely bound together with ropes. As residents in the neighbourhood of a high road extract amusement and interest from the coaches and other equipages daily passing in review, so do the inhabitants of Purī in like manner make the appearance of a ship in the roads an important epoch in the monotony of their existence. Proud is the fortunate man who first detects the sail in the distant offing; and prouder still, as well as richer, is he who, having backed with a bet his opinion as to the number of the stranger's masts, pockets the gold mohur confirmative of the accuracy of his judgment."

In those days a stay at Purī was recommended as being as good as a sea voyage, and a few Europeans used to gather there during the hot months (March to June). With the journey from Calcutta reduced to 12 hours, the place is being largely visited not only by Europeans, but also by Indians in increasing numbers. To meet the demand for accommodation, two hotels

and many houses have been built on the sand, but even so the demand is greater than the supply. This is not surprising, for the sea breeze rarely fails and ensures an equable temperature, pleasantly cool in summer and mildly cold in winter, thus making the station one of the most enjoyable in the Province for a short change.

The native town. The town proper consists practically of the temple of Jagannāth, of the different quarters radiating from it, and of the main road, named Bara Dānda, extending from the temple to the Gundichā-bāri. The quarters are named *sāhis*, and spread out somewhat in the shape of a fan, as follows: Harachandīsāhi (with Bāselisāhi) on the west, Gaurbārsāhi on the south-west, Bālisāhi on the south, Mātimandapsāhi with Kālikādevīsāhi on the south-east, Dolmundisāhi on the east, Kundaibentsāhi on the north-east, and Mārkandasāhi on the north. These *sāhis* are crowded with houses, which cluster most thickly round the temple and the chief *maths*; and the same is the case also on the wide car road (Bara Dānda), the houses thinning out only beyond its junction with the Jagannāth Trunk Road.

The town was originally built on sand, and probably began from the north and west, towards the roads to Cuttack and Ganjām, where the Madhupur or Mātiā stream is lined with the largest tanks, Narendra, Mitiāni, Mārkanda and Sivagangā. The process of sand reclamation can still be watched in the quarter called Bālisāhi, the name (*bāli* or sand) of which proclaims it one of the latest additions to the town. The sands are first fenced in by cactus hedges kept straight with bamboos, and then the inside is planted with grass and creepers. When the sand begins to pile up against the fences, more cactus is added and the fences are raised, until they are replaced by walls of earthen pots plastered and cemented by earth. Inside, as the sand begins to be held fast and covered with vegetable mould, bushes and *polāng* trees are planted, until sufficient earth and moisture can be found to plant mango groves, the favourite Hindu plantations. Then wells are sunk in the sand, or depressions in the ground are made use of to form small pools; huts are erected in the gardens, and these ultimately make room for regularly built cottages.

The town, owing its existence to the great temple, was naturally, we are told by Hamilton in his *Description of Hindostan* (1820), "inhabited by a bad-looking sickly Hindu population, composed mostly of the officiating priests and officers attached to the various departments dependent on the idol." Besides these, there were the inmates of the *maths*, which chiefly cluster round the temple. These buildings are of

masonry, with low pillared verandahs in front, and are surrounded by high walls, with plantations of trees interspersed. For a brief description of the principal monasteries, Chapter IV may be consulted. Lodging-houses are another special feature of this pilgrim town; a few are built of masonry, but the majority have earthen walls and thatched roofs. The residential houses of the *pandās* and *sebaks* generally have mud walls, but are neat and clean, standing on high plinths, with walls often painted in a picturesque way. The plinth is probably made high to guard against the moving sand and the rain water flooding the roads. The doors are, however, low and the windows, if any, small, thus affording insufficient ventilation. The houses join one another as in modern towns, a fact which probably owes its origin to the necessity of mutual protection against thefts and violence, but which naturally makes a fire more destructive. There is no special manufacture or trade, practically the only products being a few painted pictures and earthen images.

The Jagannāth temple.

The town is dominated by the great temple of Jagannāth which is at least eight centuries old. According to the palm-leaf chronicles, Yayāti Kesarī erected a temple to Jagannāth in the town, but no remains of this temple exist. Similar stories are told of other great temples in this district, viz., Lingarāj at Bhunbaneswar and the sun-temple of Konārak; and in the absence of corroboration by more reliable records, it seems safer to regard this as a mere assertion rather than as an historical fact. From the more certain evidence of inscriptions, it appears that the present temple was built during the reign of Chodagangadeva, the first Eastern Ganga king of Orissa, whose name still survives in that of one quarter of the town called Churangasāhi. The precise date of the construction of the temple is uncertain, but it was built not later than the first half of the twelfth century, and possibly a little earlier.*

The palm-leaf chronicles supply a fairly complete list of the structures originally constructed within the compound. Most of the side temples, the inner enclosure known as *kūrmabedha*, the present kitchen, the dancing and the refectory halls of the main temple did not then exist. This is partially confirmed by subsequent accounts in the chronicles. According to these records, the refectory hall was built, with the inner enclosure, in the time of Purushottamadeva (1469—97 A.D.); the sun-image was removed from Konārak to Indra's temple in the time of Narasinhadeva (1621-2 to 1644-5); while the Brahmachārī Guru of the Marāthās, removed the sun-pillar

* M. M. Chakravarti, J. A. S. B., 1398, p. 328 et seq.

in the time of Divyasinhadeva II (1779-80 to 1797-8). The date of the dancing hall cannot be traced. It is evidently later than Pratāparudradeva (1497 to 1539-40) and Govinda Bidyādharadeva (1541-2 to 1549), whose inscriptions were put on the front jamb of the porch, but are now invisible in the darkness caused by the hall in front.

The palm-leaf chronicles also record the execution of numerous repairs, which were necessitated partly by the ravages of time, but much more by the iconoclastic zeal of the Musalmāns. The earliest Mnsalmān raid recorded was in 1509 A.D. when a general of Husain Shāh, king of Bengal, made a dash on Purī. The priests had just time to remove the images by boat to a cave, probably on the Chilkā lake, and the disappointed general in his rage broke the other images, and then retreated on the arrival of King Pratāparudra. The next inroad, and a more disastrous one, took place on the defeat and death of the last independent Hindu king Mukundadeva in 1568 A.D., when Illāhābād, surnamed Kālāpāhār (literally the black mountain), came down on Purī, flushed with victory over the *Oriyā* army. The priests had removed the images to an underground shelter on the Chilkā lake, but the Musalmān general tracked the images there, dug them out, looted the temple, broke most of the other idols, set fire to the fig tree, and demolished the temple top up to the dome-neck. He also tried to burn the image of Jagannāth, but the sacred relic was saved by a faithful devotee. Subsequently the images had to be removed several times while the Khurdā Rājās were in charge of the temple—four times during the time of Purushottamadeva (1598-9 to 1621-2), twice in the time of his son Mukundadeva (1621-2 to 1644-5), once in the time of Divyasinhadeva (1692-3 to 1719-20), and once again in the time of Rāmchandradeva (1731-2 to 1742-3). Two Muhammadan Governors looted the temple funds, and another came down to Piplī with the same intention, but was induced to withdraw by the Khurdā Rājā. In fact, with the constant change of Governors, every new incumbent of the post tried to obtain as much money as he could from the temple funds, and if he failed to get satisfaction, showed his zeal by damaging the temple. It was only during the Marāthā rule that the temple was left undisturbed; and not only so, but it received additional grants from the general revenues.

It may be added that, besides the damage done by the Musalmāns a hurricane once blew down the wheel on the temple top. From the chronicles it appears that the temple top with the wheel was replaced twice, once in the time of Rāmchandradeva,

the first Khurdā king (1568-9 to 1598-9), and again in the time of Divyasinhadeva I in 1719 A.D. The temple was plastered and whitewashed not less than three times before the 19th century, and an interesting account of the work and of its cost, during the time of Narasinhadeva (1621-2 to 1644-5 A.D.), still exists.

The temple rises over the wide Car Road within double walls. The outer wall of laterite is 665 feet by 644 feet, is 20 to 24 feet high, and is capped with battlements. It is pierced on four sides by four high wide gateways, of which the eastern, *i.e.*, the Lion Gate, is the largest. In front of this gate stands the sun-pillar brought from Konārak. It is a monolithic shaft with 16 sides, 25 feet 2 inches high and 6 feet 3½ inches in circumference, with an exquisitely carved pedestal 7 feet 9 inches square and 6 feet high, and has a capital on the top 2½ feet high, over which squats a praying monkey (Aruna?). On each side a flight of steps, of which that to the east has 22 steps, leads up to the inner wall, which measures 400 feet by 278 feet and is very thick. Between the two walls lie several structures, of which the most noticeable are the kitchen in the south-east corner, the bathing platform in the north-east, and the Baikuntha in the west. The *mahāprasāds* are sold close to the north-east doorway of the inner wall. Inside this wall, and running alongside of it, are found a number of office rooms and side temples. The most important of these are in the north-west corner, viz., the temples of Indra (now Sūrya) and Lakshmī, and in the south-west corner, viz., the temples of Vimalā (or Vimalākshī) and Nrisinha, while several small temples cluster round the indispensable fig tree.

In the centre of the stone-flagged pavement rises the great temple consisting of four buildings, viz., (1) the refectory hall, (2) the dancing hall, (3) the porch, and (4) the tower. The general characteristics of these buildings are similar to those of the Lingarāj at Bhubaneswar. They have high plinths and cubical bodies, with elaborate carvings and mouldings outside, but are plain inside, with the exception of some paintings in the dancing hall. The roof is shaped like a tapering tower in the sanctuary, and is pyramidal in the rest, with domes above, except in the dancing hall. The high porch doorway on the east is as finely and elaborately carved as in the Bhubaneswar temples and at Konārak. The tower dome is capped by a gigantic wheel, the emblem of Vishnu. The tower has a base about 80 feet square, is 190 feet high, and stands over a pavement, which is in turn 20 feet higher than the road outside. It has inside a false ceiling composed of stone blocks on iron

beams, from which one piece, 20 feet long, fell in 1877, but fortunately without causing any loss of life, as the images were out on the cars. It was found too expensive to replace it by a single block. This inner sanctuary contains a steatite platform, 4 feet high, on which are placed, beginning from the right, the image of Jagannāth 85 *yavas* high, of Subhadrā, 54 *yavas* high, of Balabhadra, 84 *yavas* high, and the stump of the Sudarsana wheel, 84 *yavas* ; long a *yava* or barley-corn is taken to mean three-fourths of an inch, or possibly a little more. The daily rites and the periodical festivals have been described in Chapter IV.

Gundichā-bāri. About two miles from the great temple, and at the other end of the Car Road, lies the Gundichā-bāri, *i.e.*, the retreat to which Jagannāth, his elder brother Balabhadra, and his younger sister Subhadrā are driven, each on his or her car, in the beginning of the rains. They start on the second *tithi* of the dark half of the lunar month in Ashādha (June-July), stop in this temple, or rather house, till the tenth *tithi*, and then return to the great temple. Except for these few days, it is unoccupied and is accessible to non-Hindus. The building is surrounded by a wall 420 feet by 320 feet, is 20 feet high and 5 feet 2 inches thick, and stands in the middle of a garden. It consists, as usual, of four parts connected with kitchen rooms by a narrow passage. The tower is 75 feet high with a base measuring 55 feet by 46 feet outside and 36⅔ feet by 27 feet inside. The tower and the porch are, according to the palm-leaf chronicles, contemporaneous with the great temple, while the dancing and the refectory halls are later additions. Like the great temple, they bear traces of several plasterings, and are covered in places with obscene images in lime and plaster, which, it is said, were put up 40 years ago. The origin of the word *gundichā* is unknown. It may be connected with the words *gundchi-mushā*, a tree-rat, *i.e.*, the squirrel, and *gundichā pratipada*, the stick festival of the Deccan, and may thus signify "the log house."

Minor sacred places. The minor sacred places consist of the temples of the eight Sambhus or Sivas guarding the eight quarters, their consorts the Chandīs, and the tanks. Of these, the Mārkanda tank with the Mārkandeswar temple, the Lokanāth temple with the Sivagangā tank, the Indradyumna tank with the Nīlakantheswar temple, and the Swetgangā and Narendra tanks deserve special mention. The Mārkanda tank is stone-lined throughout, covers an area of 3·83 acres and is of irregular shape, being 350 feet long on the north, 385 feet on the south, 542 feet on the west, and 505 feet on the east. It is said to

have been repaired at the cost of the late Rājā Kirttichandra of Burdwān. On its south-west bank stands the Mārkandeswar temple, which is a close imitation of the Lingarāj temple at Bhubaneswar and probably was built at a date between the construction of that temple and of the Jagannāth temple. East of it, on the same bank, lies a small temple of Siva built in the Bengali style of architecture, with eaves projecting, as in bamboo-thatched roofs; and at the northern *ghāt* under a fig tree are placed eight stone images representing the sacred mothers.

The Lokanāth temple lies about two miles off from the Jagannāth temple on the western boundary of the town in a mango grove. Its presiding deity, a linga, remains always under water in a vat fed by a spring, except on the Sivarātri festival day, when the water is specially baled out to make the top of the linga visible to the worshippers. This god is more dreaded than Jagannāth, and an oath on his *pāduka* or holy water is often administered to witnesses in the Courts at the special request of the parties. The Indradyumna tank marks the boundary on the north-east side. It is nearly oblong, measuring 485 feet by 396 feet and covering an area of 4·52 acres, with the temple of Nīlakantheswar on its south-west bank. It contains several big old tortoises, which come to pilgrims when called for food with the cry "*kede kede Gopāla*." It is named after the mythical king who built the first temple of the three deities.

The Swetgangā or white Ganges is the name given to a small tank (254 feet by 180 feet), very deep (about 40 feet) and very dirty, the sanitation of which has caused much anxiety to the local authorities, entailing frequent pumpings. In complete contrast to it is the Narendra tank, three quarters of a mile north-east of the great temple, measuring 734 feet long by 873 feet broad and covering an area of 8·11 acres. This is a fine sheet of water, which is kept comparatively pure by flushings from the Madhupur river during the rains through a channel in the western corner. It has a small temple in one part connected with the south bank by a bridge, to which the proxy of Jagannāth is brought for 21 days during the Chandana-jātrā (sandal-wood festival) in April-May. It contains a few crocodiles and swarms with large fish, which are caught with rods under permits granted by the Municipality; but no nets are allowed except on the seventh to the ninth *tithis* of the Durgā *Pūjā* days, when the fish thus caught are offered to the goddess Vimalā in the great temple. The tank is said to have been dug at the expense of an officer of the king, called Lakposi Narendra, towards the end of the 13th century.

The Swarga-dwāra and the Chakra-tīrtha, though in the sandy tract, may be mentioned here. The Swarga-dwāra is so named because a dip in the sea near it is believed to form a door to heaven. It is marked by a stone block, and is said to be the place when the god Brahmā came down to consecrate the images of king Indradyumna. It is largely frequented by bathers in the month of Kārttika (October-November), especially on the full-moon day. The Chakra-tīrtha is at the other end of the sandy waste, where pilgrims come to perform *srāddha.* It is evidently a part of the old bed of the Balgandi stream, that flowed across the Car Road to the sea, and formed the north-eastern boundary of the town. Remains of a temple are found here, said to have been built by the king who built the bridges Atharanalā and Chāranalā over the Trunk Road.

The Atharanalā is a bridge of eighteen openings over the Madhupur stream, having spans of 7 to 16 feet, in all 290 feet long, with horizontal arches of laterite and sandstone. It is said to have been built towards the end of the 13th century A.D. and is mentioned in Chaitanya's biography (16th century) and William Bruton's travels (1633). The followers of Chaitanya also visit the sites held sacred from association with that great apostle, *e.g.*, the Rādhākānta *Math*, where Chaitanya lived, and where his cell, quilt and wooden shoes are still shown, and Totā-Gopīnāth on the west (near the sea) where he is said to have disappeared.

Purī as a health resort.

In conclusion, the following remarks may be quoted from an editorial article *Purī as a Health Resort for Bengal* published in the Indian Medical Gazette, April 1906:—"There are practically speaking two Purīs, or rather there are two parts of it. From a sanitarium point of view there is the long beach and ridge above it, extending for a couple of miles in length and half a mile in depth. This extends, say from the public gardens near the railway to far beyond the white Customs House. Beyond or to the south of this Customs House, which with its flag-pole is a landmark on the beach, lies a new quarter, almost entirely inhabited by Indian gentlemen, who have built themselves houses here. Between the Customs House and the railway on the ridge lie all the houses of the present officials, and here are the sites of the future houses, if, as we believe, Purī is to become a "week-end" (or holiday resort for inhabitants of Calcutta and Bengal. This ridge rises slowly from the beach and is airy, dry and open. Many good sites for houses could here be selected. Behind and at a considerable distance from this ridge lies the native town of Purī, built around the square of Jagannāth's

temple and along the very broad road from the temple to the garden, along which the famous car is dragged by the willing hands of devotees or of hired coolies. The two portions of the town are apart, and any insanitary conditions which might at times prevail in the town need not affect the dwellers on the ridge.

"It need not be imagined that Purī is in the hot weather as cool as the hills. It is not, but the heat is never excessive and is always tempered by the strong cool pure breezes from the sea. The present and the future houses are, and will be, close to the beach and the fresh wind blows through the houses all day. Punkhas are seldom, if ever, wanted, certainly not at night time.

MONTH.	Temperature.	1904.	1905.	Wind velocity.
				Miles.
April ...	Average max. ...	86°F.	89°	19 per hour.
	" min. ...	78°	75°	
May ...	" max. ...	89°	90°	25 "
	" min. ...	80°	80°	
June ...	" max. ...	88°	90·5°	18 "
	" min. ...	78°	82°	
July ...	" max. ...	86°	88°	18·5 "
	" min. ...	77°	80°	
August ...	" max. ...	87°	89°	14 "
	" min. ...	79°	81°	

The marginal table shows the actual figures for temperature and wind for the past two years, and are expressive. The important point is that while these temperatures are comparatively low, they are made still more endurable by the ever present sea breeze. Nor is the rainfall heavy—in fact, for a district in Bengal it is light. The sandy soil soon absorbs the rain, and a few minutes after a shower the roads are dry again, and well fitted for cycling and walking.

"As regards health, it is not easy to get reliable statistics. The European population has only consisted of the few district officials, and the native population figures are vitiated by the fact that there is a continuous stream of pilgrims in and out of the town. The statistics of the Sanitary Commissioner, however, show that Purī district is the least malarious in Bengal, and those of the local hospitals show that the town is singularly free from malaria and from tuberculosis. Purī, we consider, can be made a place of value as a resort for invalids, especially those recovering from fever, from dysentery or other bowel complaints or suffering from incipient tuberculosis. Children do especially well at Purī and can play about on the sands for most of the day. Victims of chronic asthma often find relief there."

Purī Subdivision.—Headquarters subdivision, situated between 19° 28′ and 20° 23′ N. and between 85° 8′ and 86° 25′ E.,

with an area of 1,528 square miles. The Bay of Bengal forms the south-eastern and the Khurdā subdivision the north-western boundary; the district of Cuttack lies to the north, and the Ganjām district of the Madras Presidency to the south-west. The boundary between the Purī and Khurdā subdivisions is a well-defined line made by the channels of the Koyākhāi and Dayā. The valley of the Dayā is crossed by low hills at two points only—at Dhauligiri, an isolated peak in north Kotrāhāng, and at Jagadalpur close to the Delāng station of the Purī branch railway. With these exceptions, the subdivision is an alluvial deltaic country stretching from the base of the Khurdā hills to the Bay of Bengal.

The main portion of the delta is contained between the channels of the Dayā on the west and the Kushbhadrā on the east. A belt of sandy ridges stretches along the entire sea-coast, varying from 1 to 4 miles in breadth; and on the south-west lies the great expanse of water called the Chilkā lake, which occupies about one-fifth of the total area of the subdivision. The Koyākhāi, the southern branch of the Kātjurī river, is the head stream of the delta, and has three main distributaries, *viz.*, the Kushbhadrā, Bhārgavī and the Dayā. The country between the Bhārgavī and Dayā has two chief drainage channels—the Ratanchirā and the Nūn; and the Prāchī, carries down to the sea the drainage of the border country between Cuttack and Purī.

The population of the subdivision was 658,048 in 1901, as against 613,575 in 1891, its density being 431 persons to the square mile. It contains one town, Purī, its headquarters (population 49,334), and 1,889 villages. The famous temple of Jagannāth is situated in Purī town, while other important remains are the Black Pagoda at Konārak and the Asoka inscriptions at Dhauli.

Satyabādī.—A village in the headquarters subdivision, situated 12 miles north of Purī town and within less than a mile of the Sākshigopāl railway station. It has a population, according to the census of 1901, of 1,547 persons. It is surrounded by *sāsans* or Brāhman villages, and is a centre for the local trade in grain and cocoanuts. Archæologically, it is of considerable interest on account of the temple dedicated to Sākshigopāl, an incarnation of Krishna, which is visited by pilgrims on their way to Jagannāth. The name Sākshigopāl means "witness Gopāl," *i.e.*, Krishna, and is derived from the following legend: Two Brāhmans of Vidyānagar went on pilgrimage, and after visiting many sacred sites, came at last to Brindāban. There the elder promised his companion, in the presence of Gopāl, that he would

give him his daughter in marriage; but when they returned home the marriage was bitterly opposed by the wife and relations of the elder Brāhman. Influenced by their protests, the latter gave the young Brāhman evasive replies, denying that he had made any promise; and when the young man declared that the promise, being made in the presence of the god, should not be trifled with, they all laughed at him and told him to bring his witness. The young man thereupon went to Brindāban and prayed that the god would come and attest the promise. His prayer was granted, on condition that he should never look back while on the road. When close to Vidyānagar, the young man, yielding to his desire to see whether the god was really following him, looked back, and thereupon the image stood firm and would not move. He went on into the town and told the Brāhman and the townsfolk of the arrival of the god; whereupon they all went outside the town and were astonished to find a heavy image standing in the open plain. This miracle made the old Brāhman repent, and he gave his daughter in marriage to the young man. The news reached the ears of the king, who built a temple on the spot and worshipped the image with great pomp and ceremony.

The image was brought from Vidyānagar by king Purushottamadeva (1471—97 A.D.) as part of the spoil which he took from the captured city. He installed it in Cuttack, where Chaitanya saw it during his pilgrimage in 1510 A.D.; but subsequently it was removed to the present temple at Satyabādī during the period of the Mughal rule. The temple is located in a garden, and is about 70 feet high. The image, which is 5 feet high and cut out of a great stone, represents a god standing erect with his hands hanging by his side. To the left is an image of Rādhā, standing a little over 4 feet high.

Udayagiri.—*See* Khandagiri.

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